

COVID-19 Immunogenicity Analysis Report

USG COVID-19 Response 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

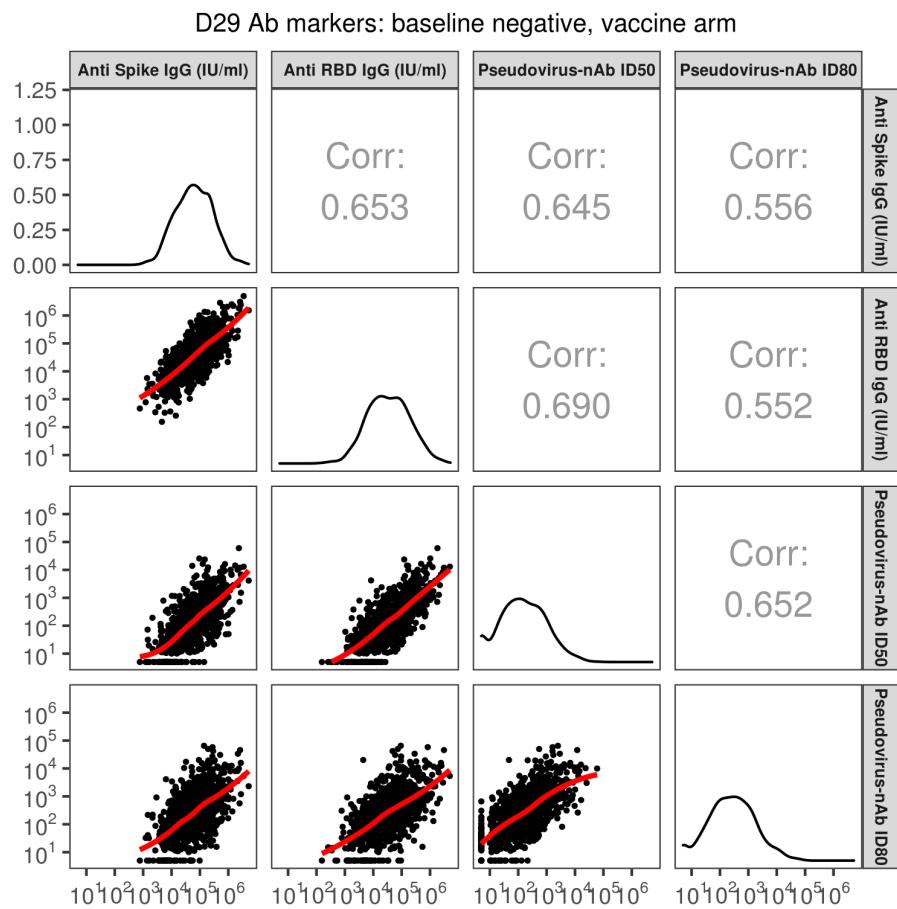


Figure 1.1: Pair plots of D29 Ab markers: baseline negative vaccine arm

1.1. PAIRS PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT19

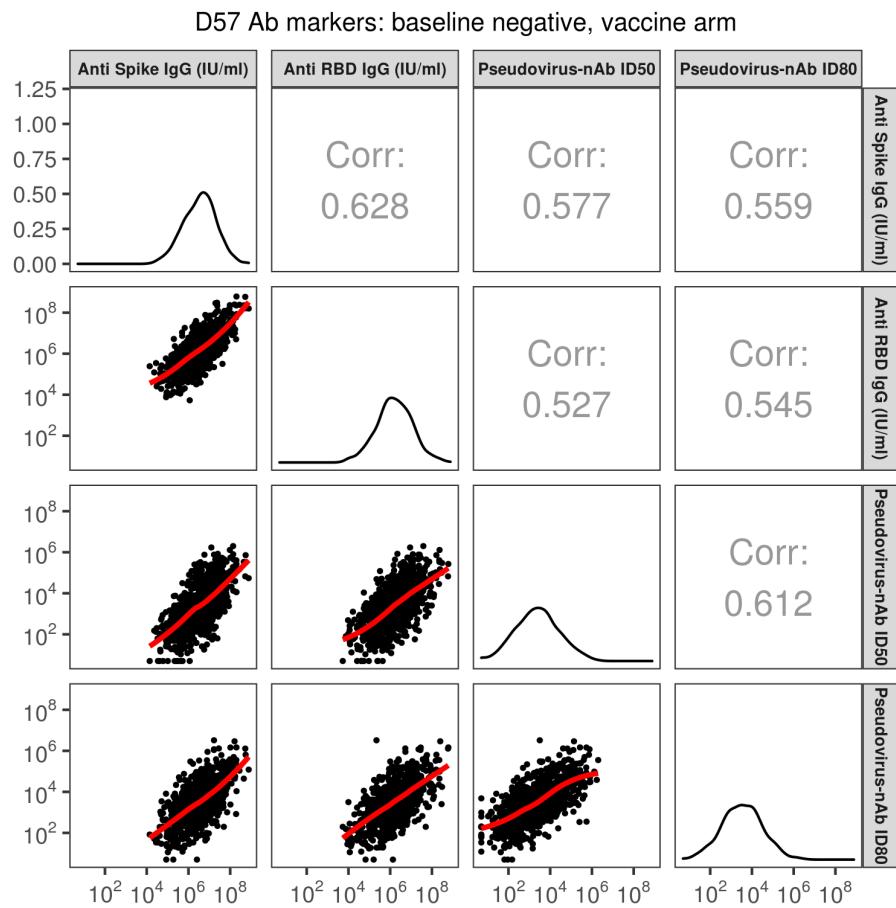


Figure 1.2: Pair plots of D57 Ab markers: baseline negative vaccine arm

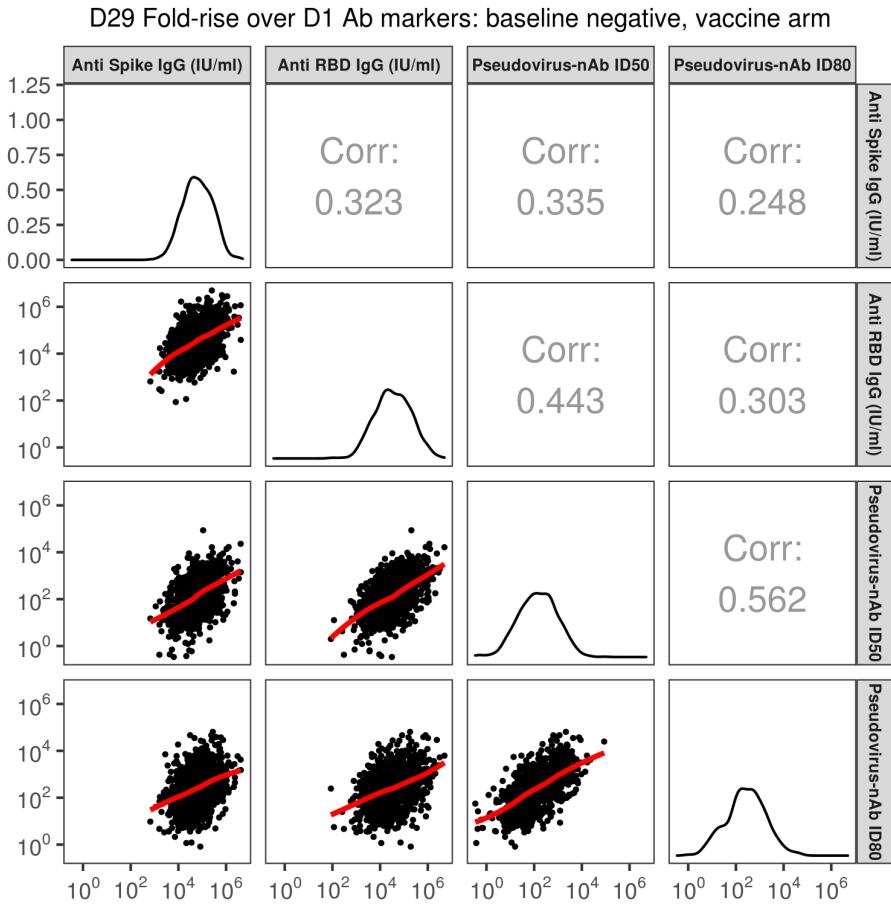


Figure 1.3: Pair plots of D29 fold-rise over D1 Ab markers: baseline negative vaccine arm

1.1. PAIRS PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT21

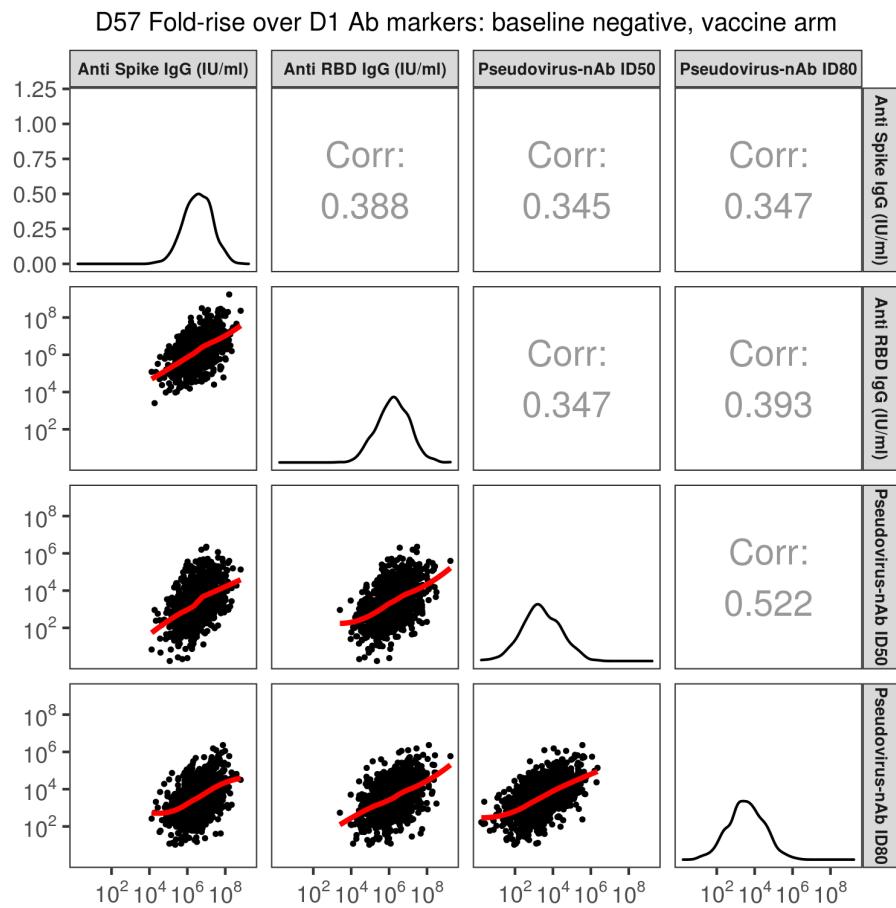


Figure 1.4: Pair plots of D57 fold-rise over D1 Ab markers: baseline negative vaccine arm

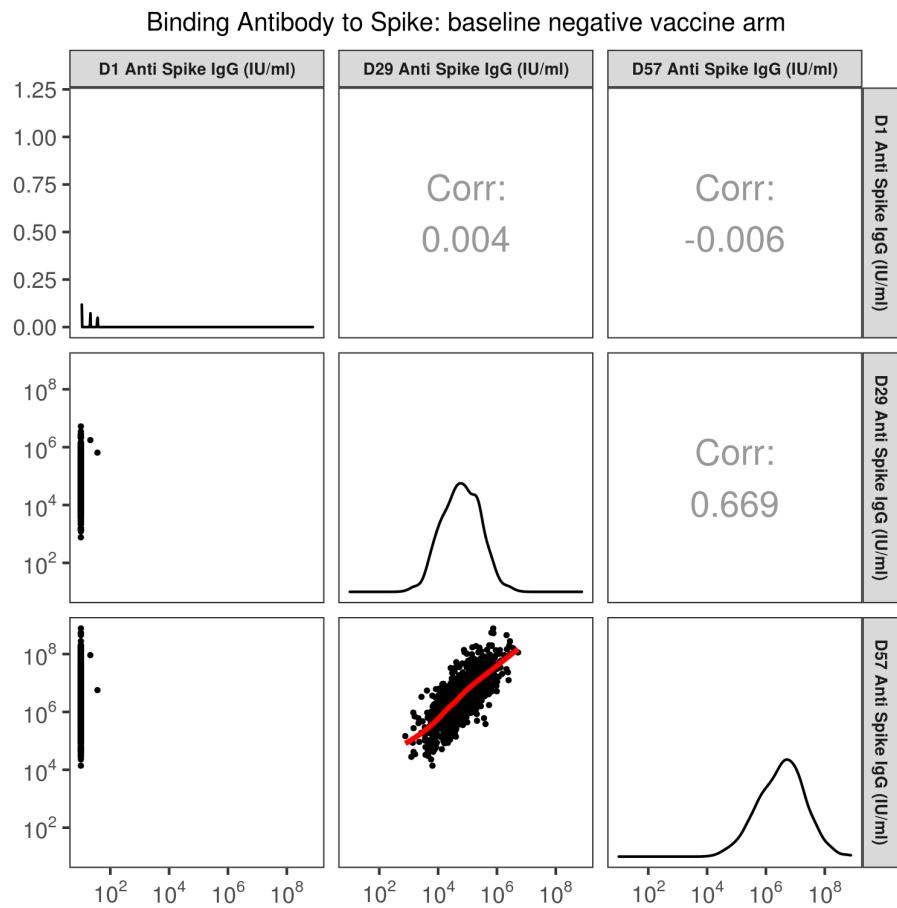


Figure 1.5: Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline negative vaccine arm

1.1. PAIRS PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT23

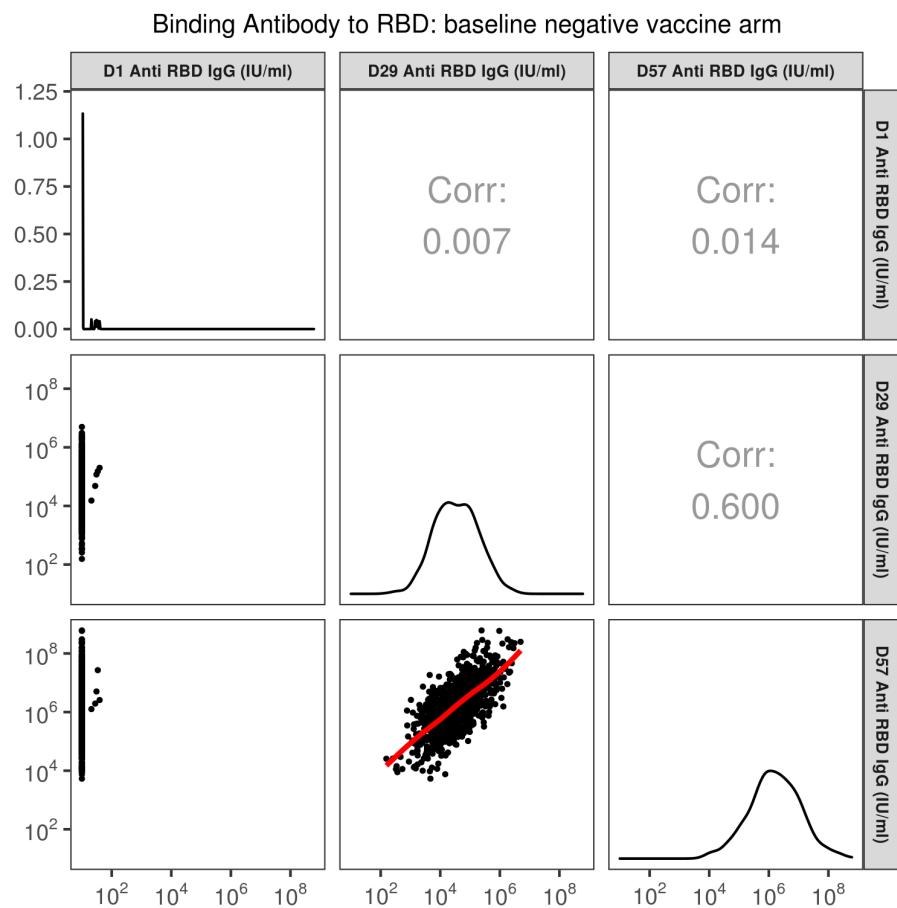


Figure 1.6: Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative vaccine arm

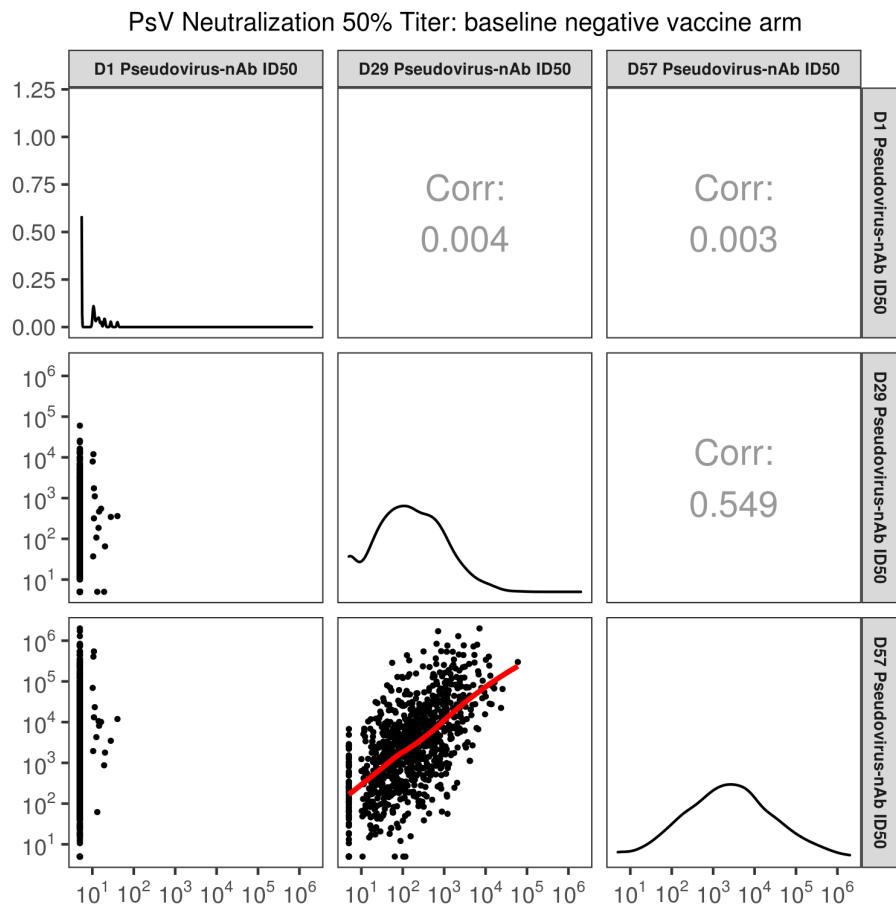


Figure 1.7: Pair plots of D1, D29 and D57 PsV Neutralization 50% Titer: baseline negative vaccine arm

1.1. PAIRS PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT25

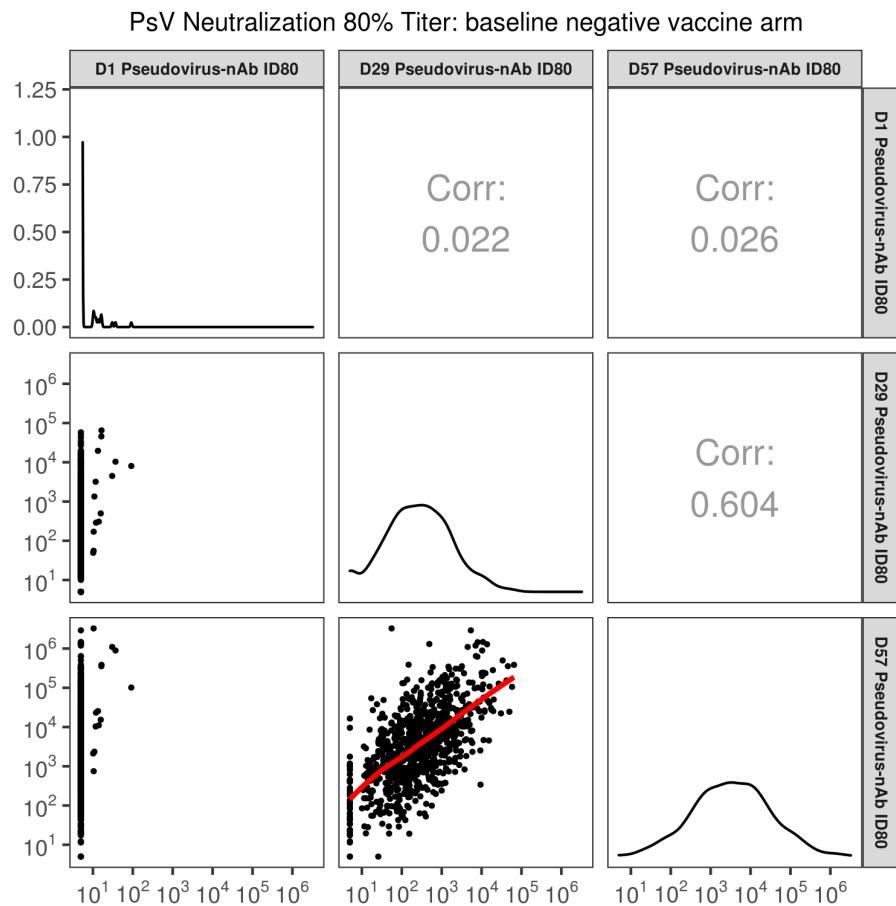


Figure 1.8: Pair plots of D1, D29 and D57 PsV Neutralization 80% Titer: Baseline negative vaccine arm

1.1.2 Baseline SARS-CoV-2 Positive

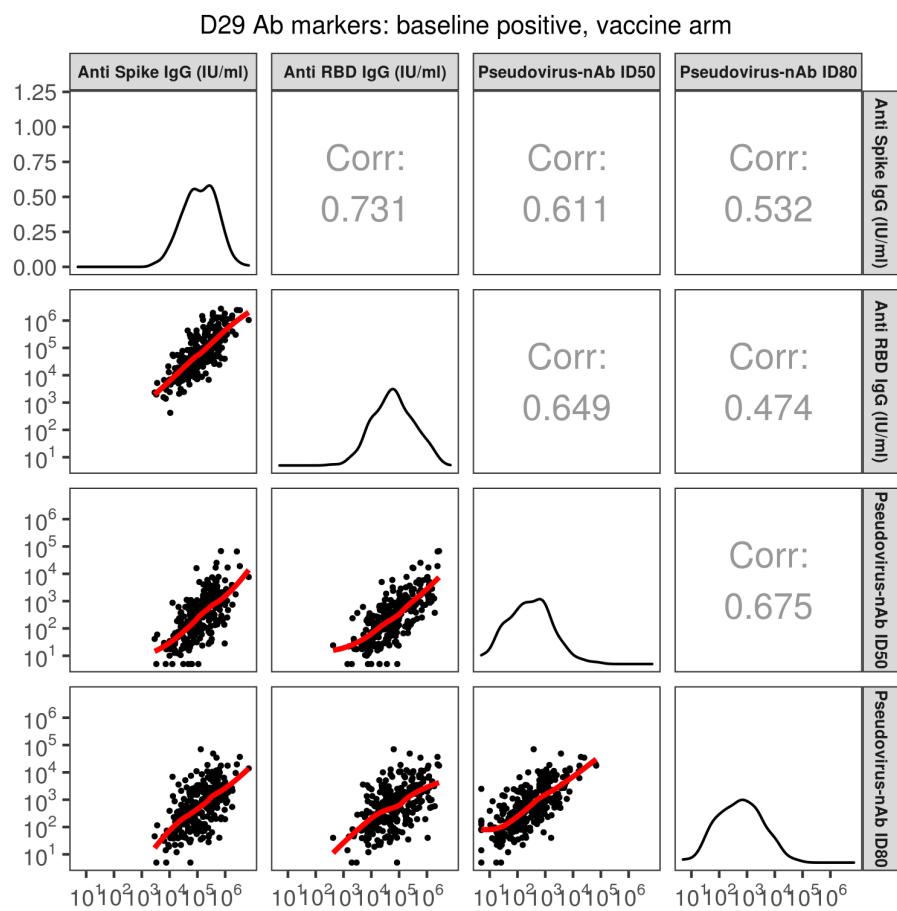


Figure 1.9: Pair plots of D29 Ab markers: baseline positive vaccine arm

1.1. PAIRS PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT27

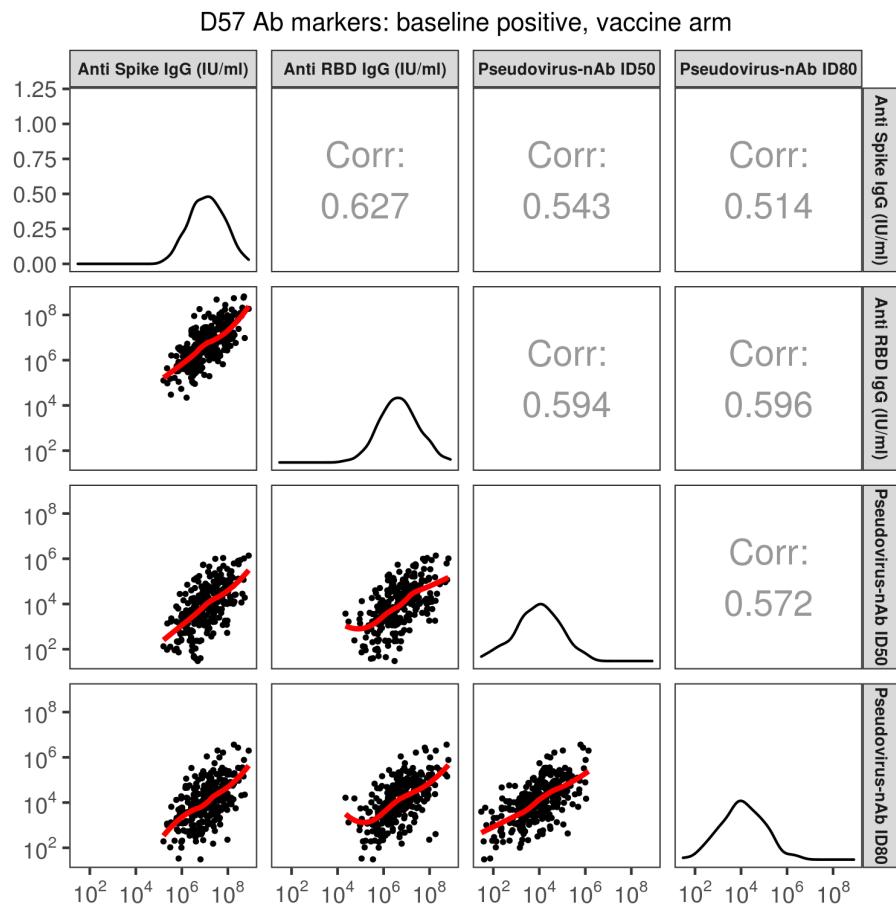


Figure 1.10: Pair plots of D57 Ab markers: baseline positive vaccine arm

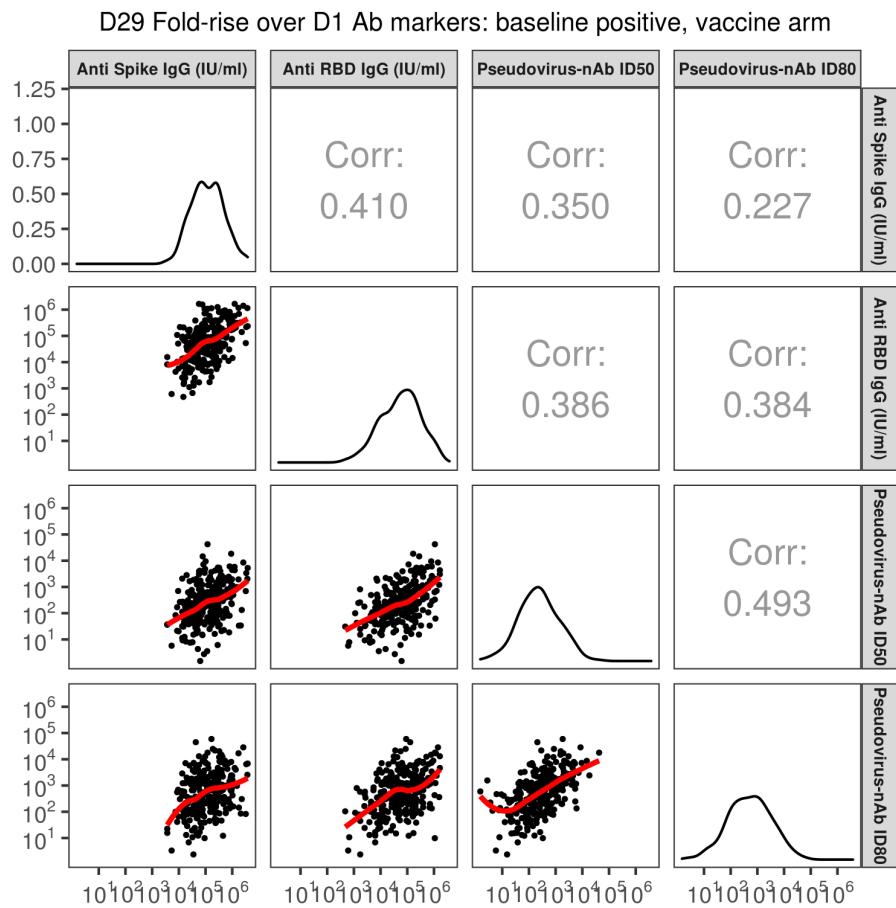


Figure 1.11: Pair plots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm

1.1. PAIRS PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT29

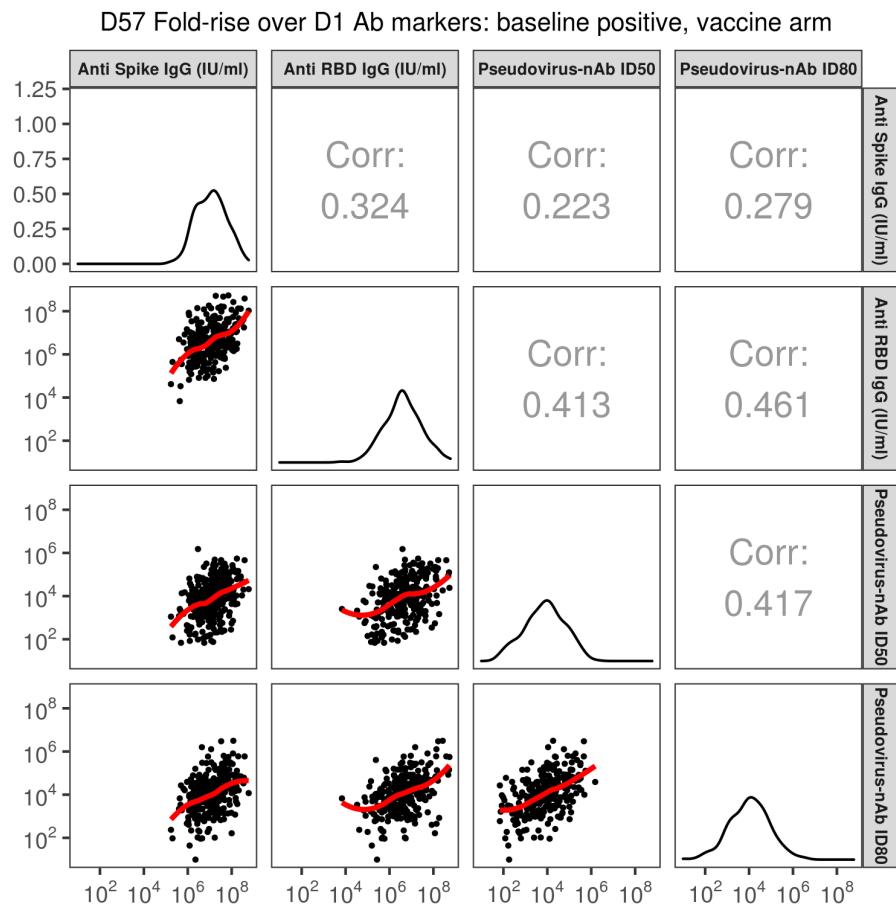


Figure 1.12: Pair plots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm

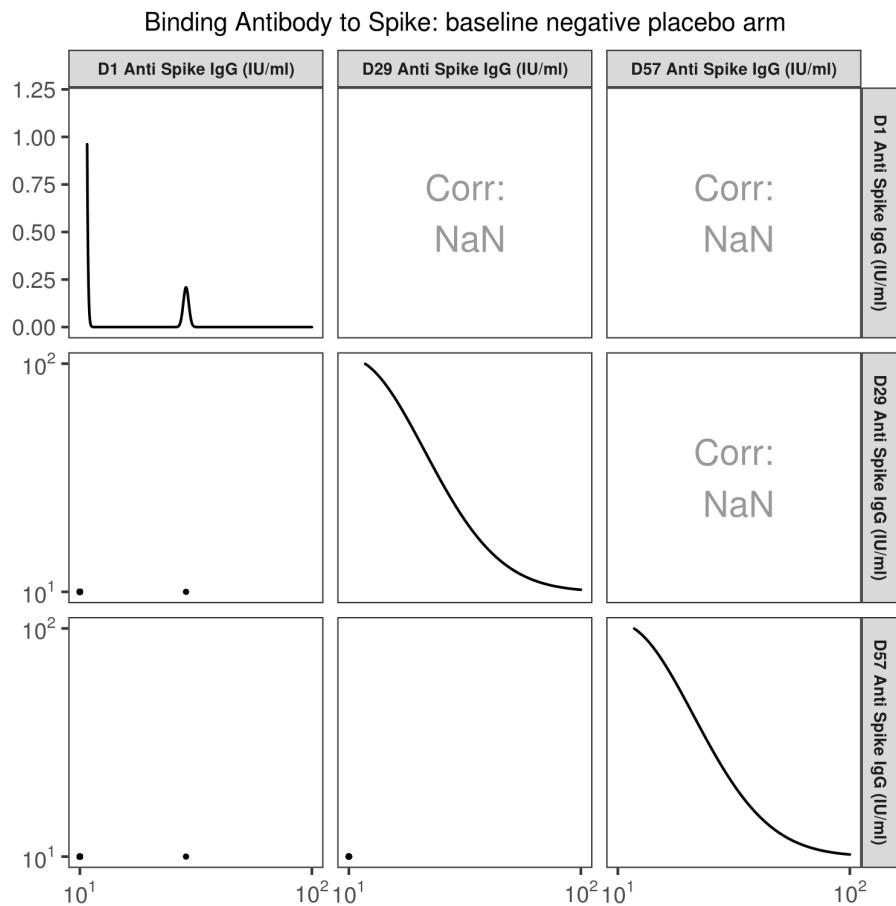


Figure 1.13: Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline negative placebo arm

1.1. PAIRS PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT31

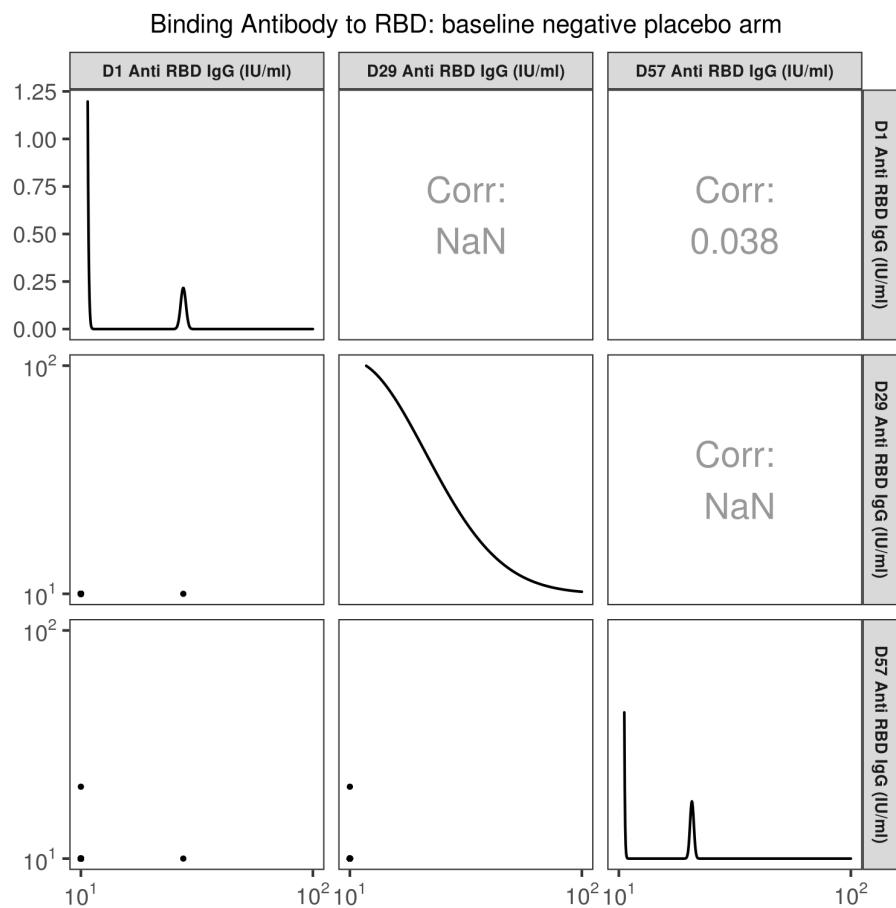


Figure 1.14: Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative placebo arm

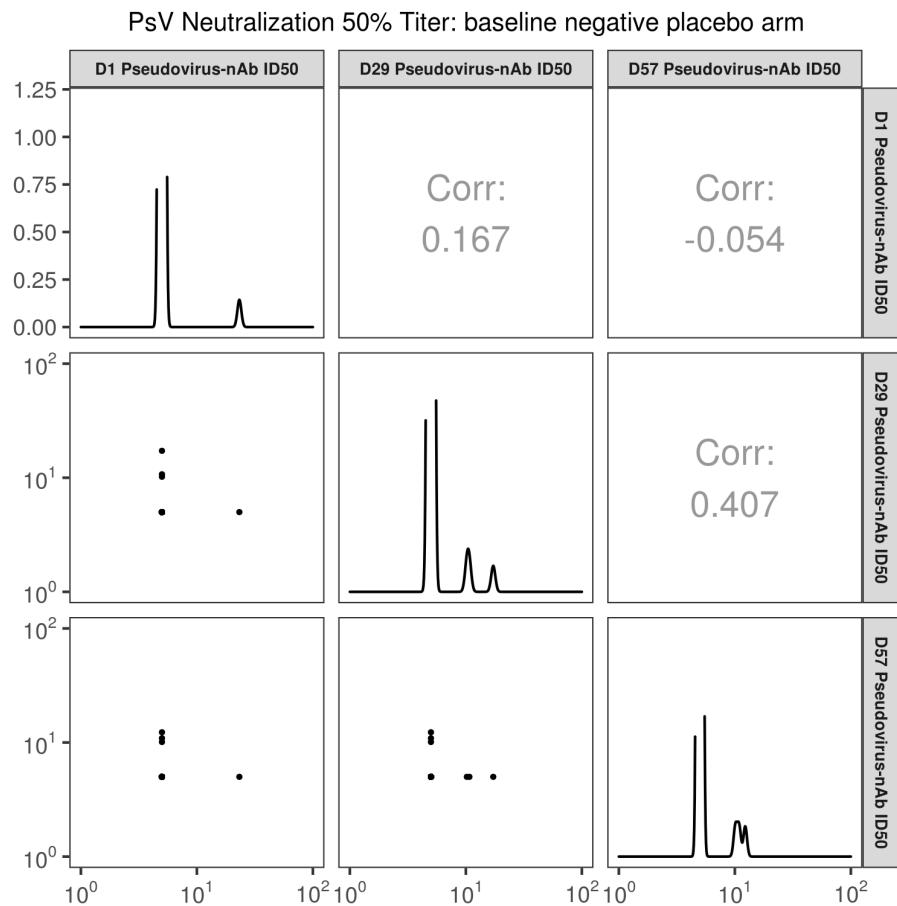


Figure 1.15: Pair plots of D1, D29 and D57 PsV Neutralization 50% Titer: baseline negative placebo arm

1.1. PAIRS PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT33

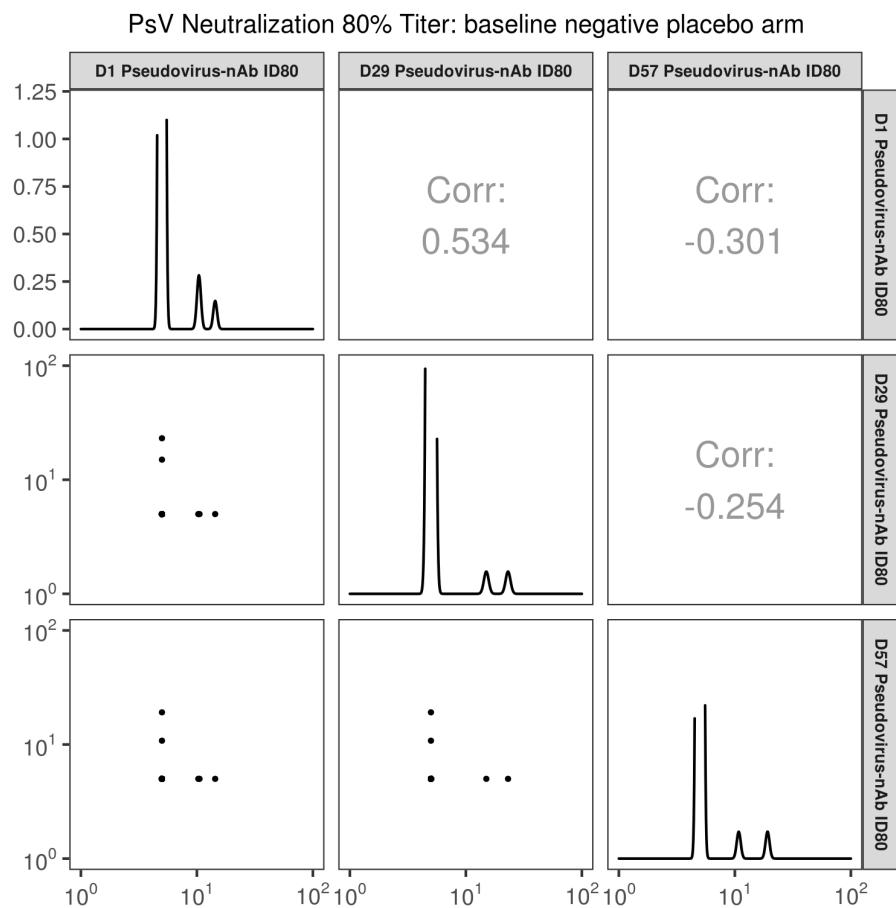


Figure 1.16: Pair plots of D1, D29 and D57 PsV Neutralization 80% Titer: Baseline negative placebo arm

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

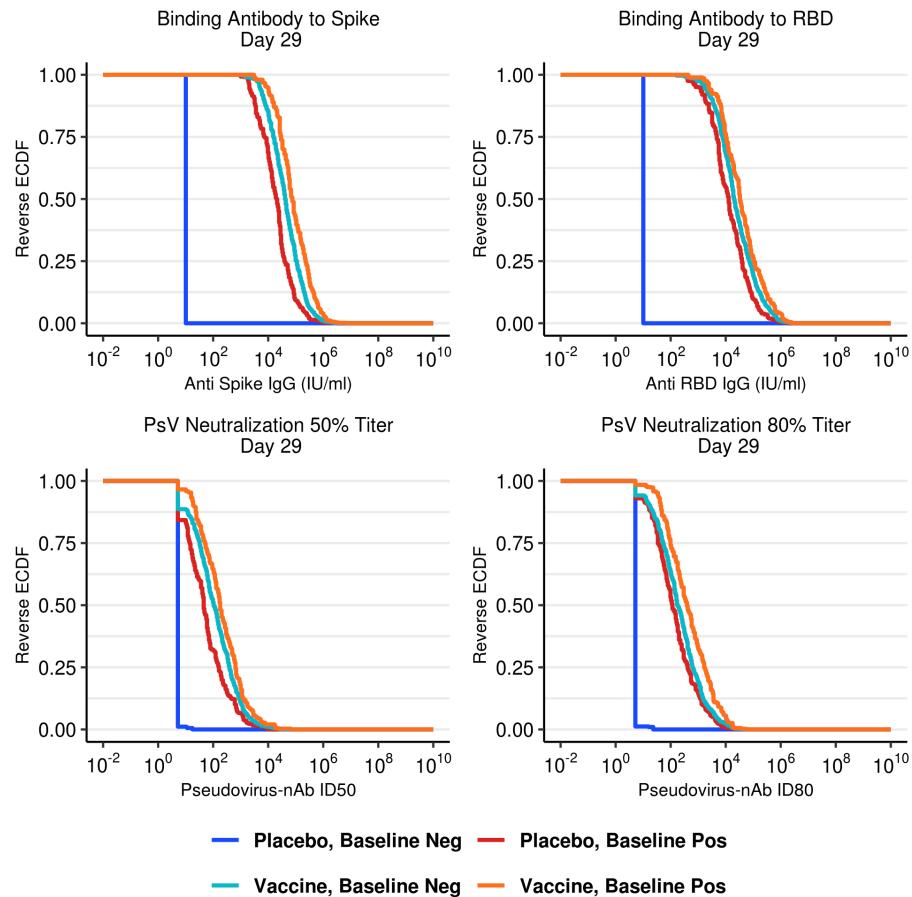


Figure 1.17: RCDF plots for D29 Ab markers: by baseline status x randomization arm

1.2. RCDF PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT35

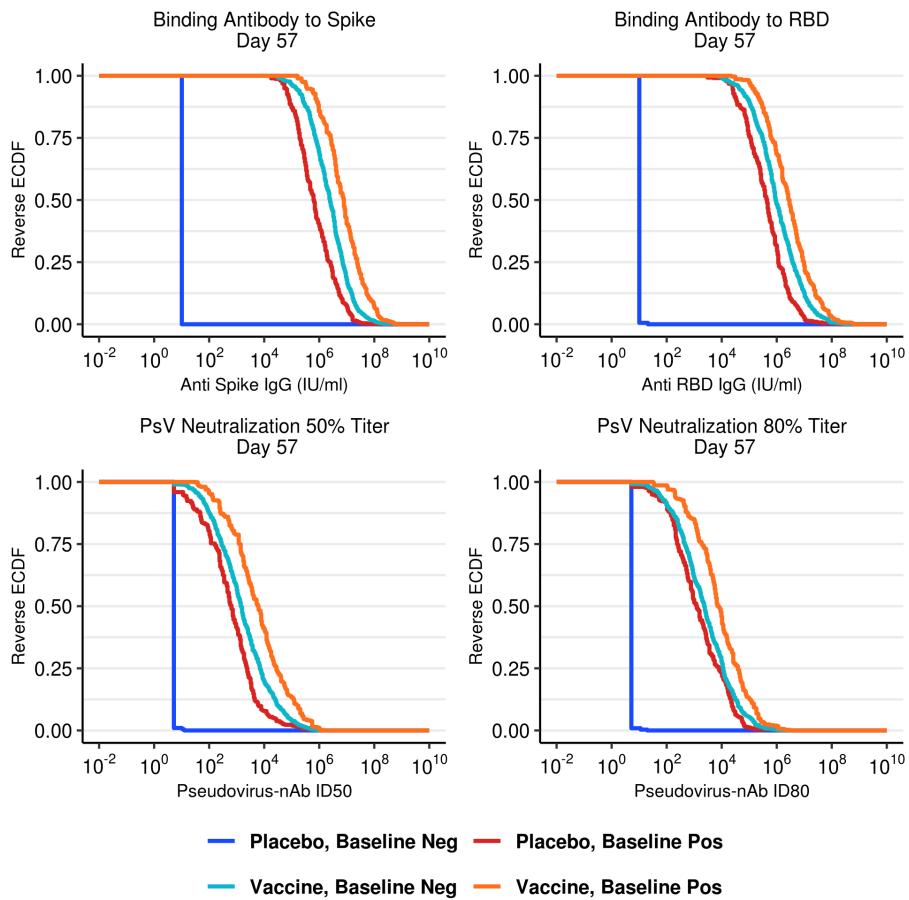


Figure 1.18: RCDF plots for D57 Ab markers: by baseline status x randomization arm

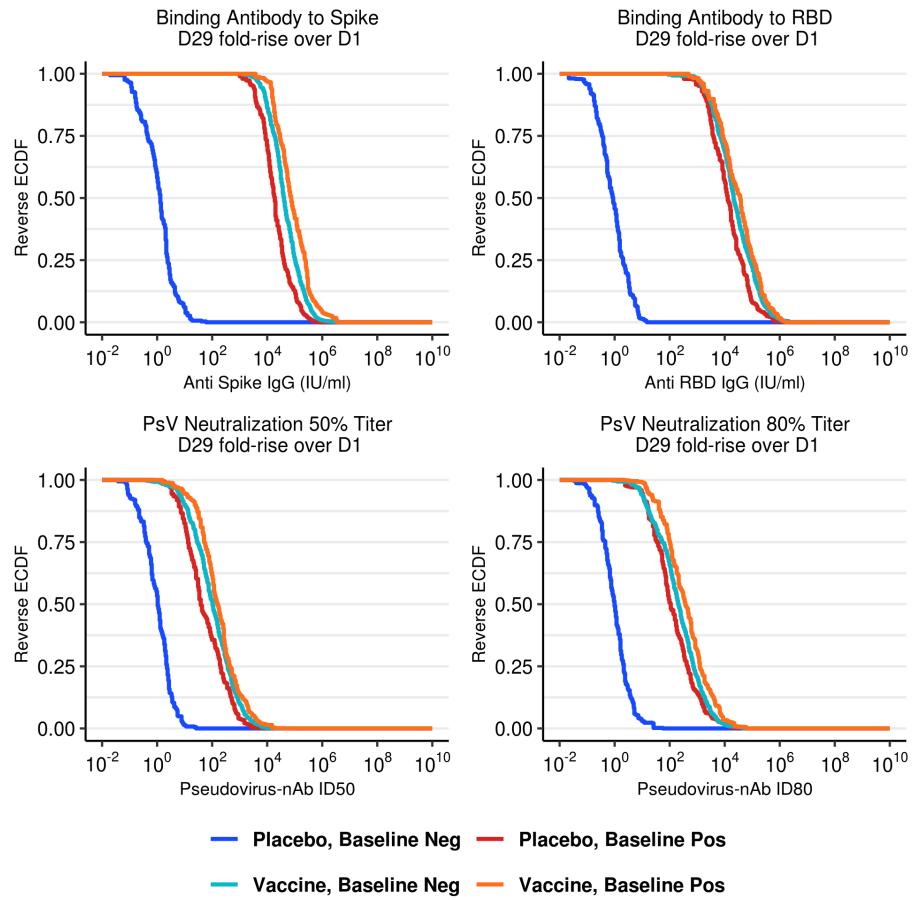


Figure 1.19: RCDF plots for D29 fold-rise over D1 Ab markers: by baseline status x randomization arm

1.2. RCDF PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT37

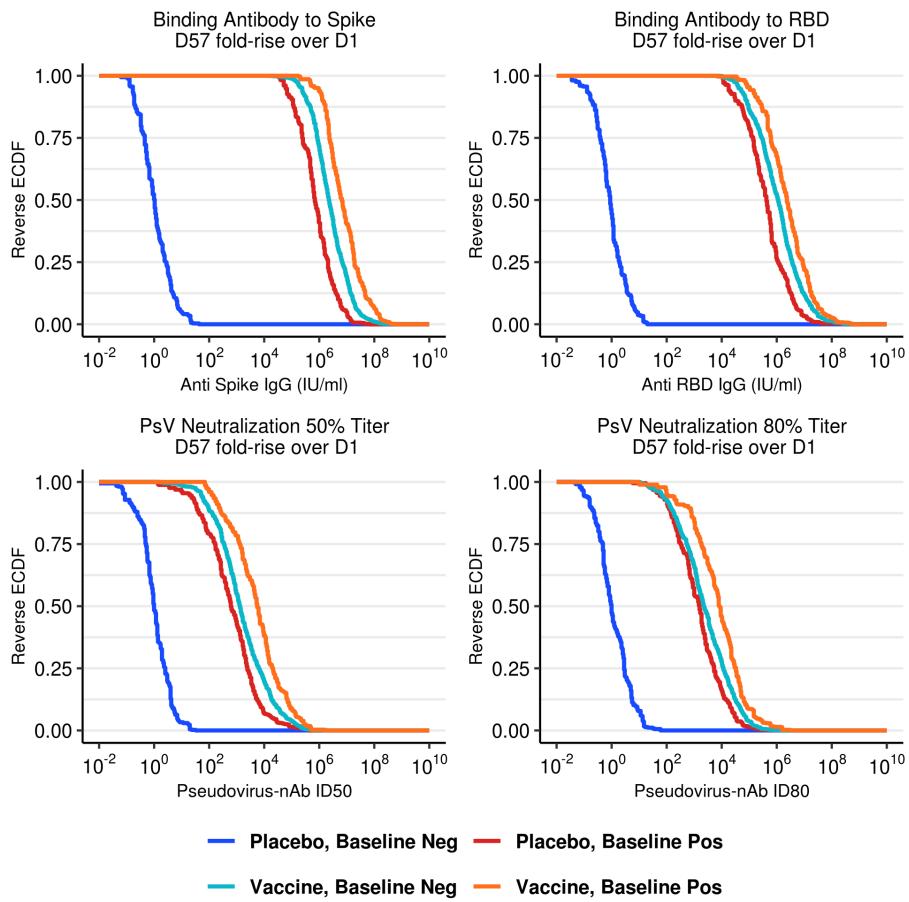


Figure 1.20: RCDF plots for D57 fold-rise over D1 Ab markers: by baseline status x randomization arm

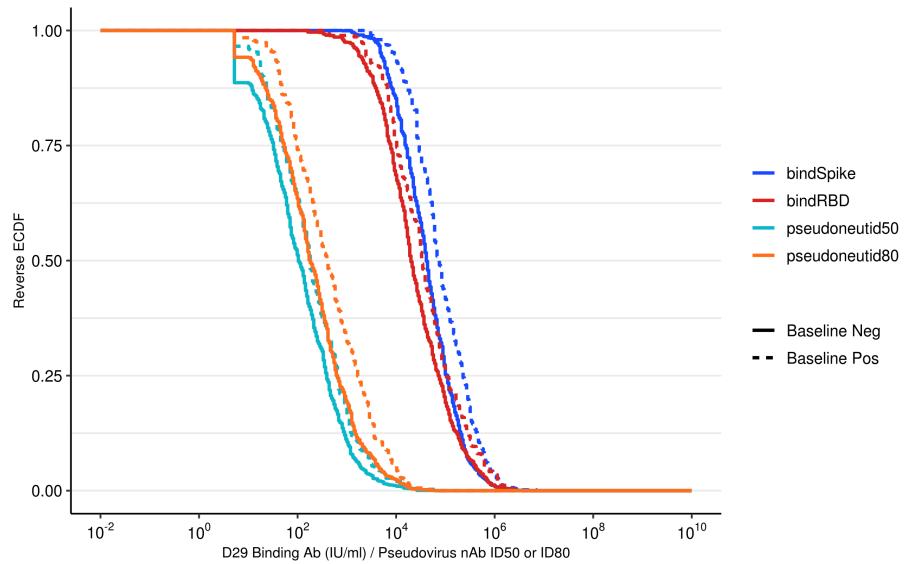


Figure 1.21: RCDF plots for D29 Ab markers: by baseline status for the vaccine arm

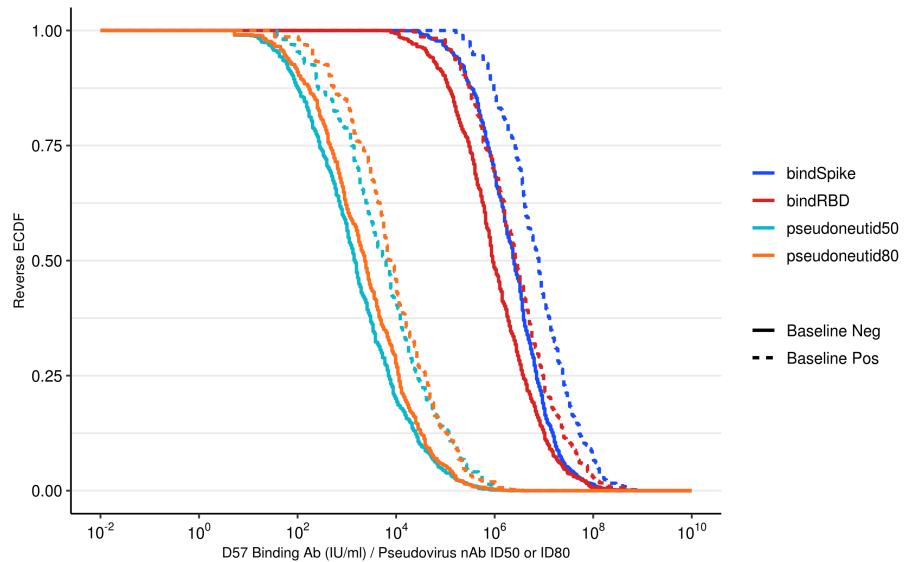


Figure 1.22: RCDF plots for D57 Ab markers: by baseline status for the vaccine arm

1.2. RCDF PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT39

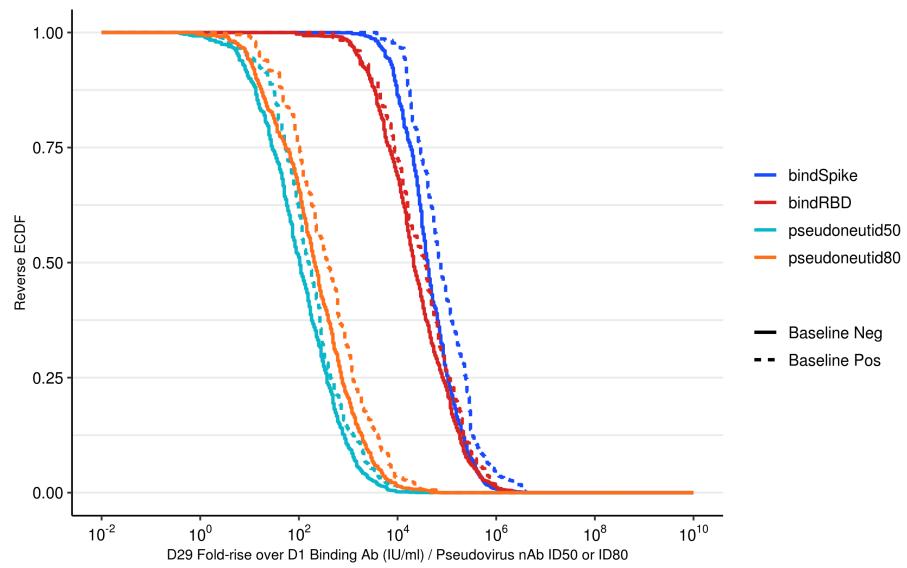


Figure 1.23: RCDF plots for D29 over D1 fold-rise Ab markers: by baseline status for the vaccine arm

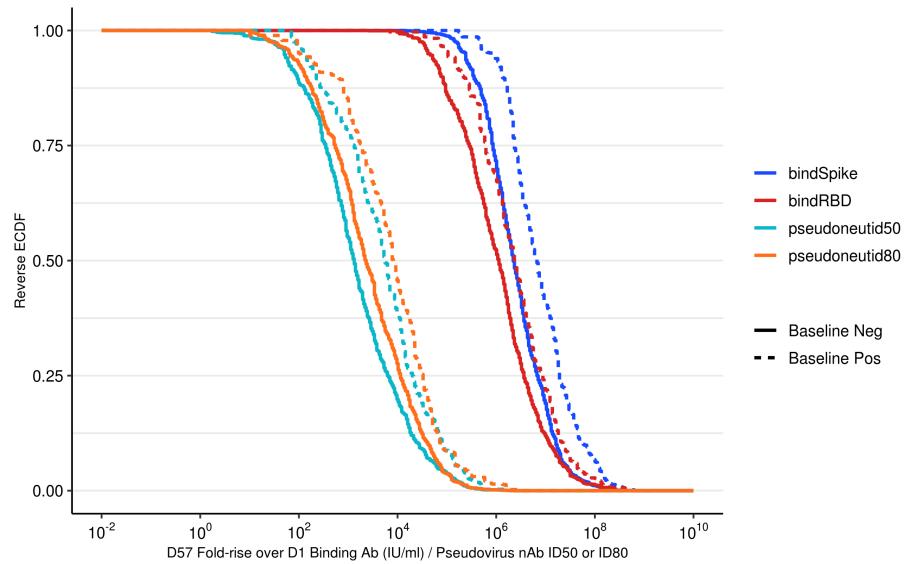


Figure 1.24: RCDF plots for D57 fold-rise over D1 Ab markers: by baseline status for the vaccine arm

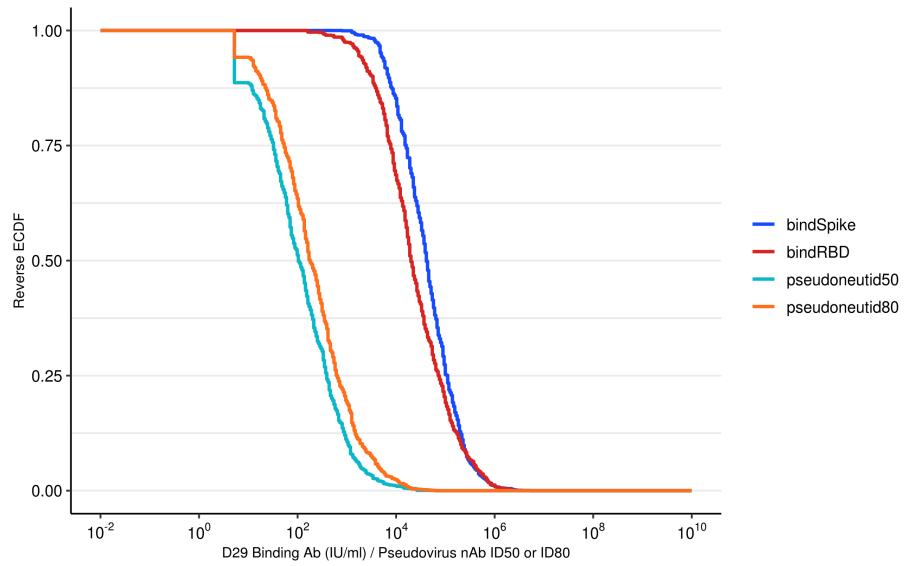


Figure 1.25: RCDF plots for D29 Ab markers: baseline negative vaccine arm

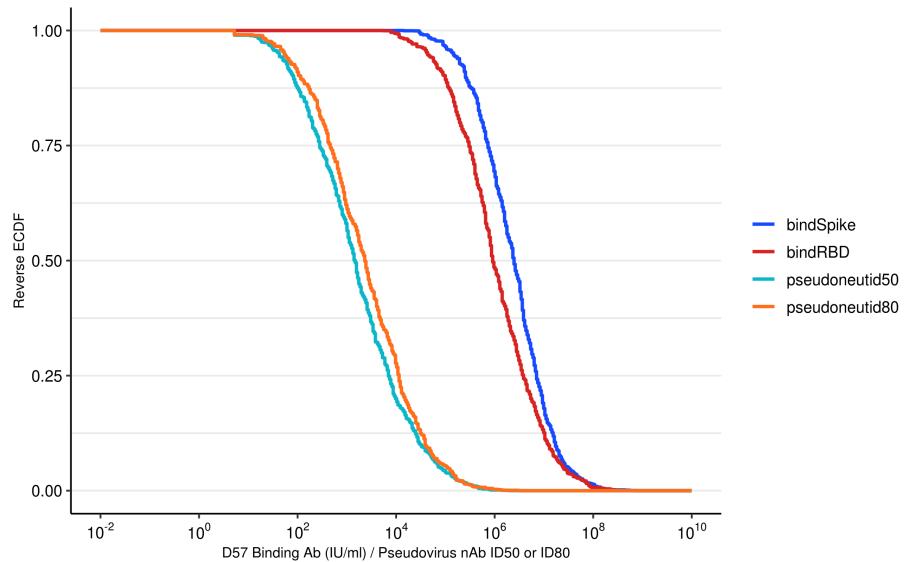


Figure 1.26: RCDF plots for D57 Ab markers: baseline negative vaccine arm

1.2. RCDF PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT41

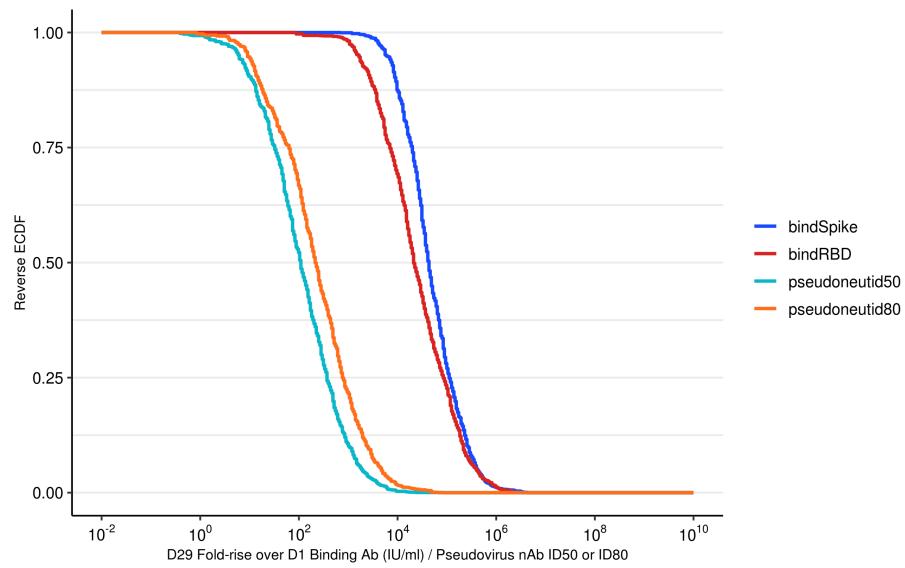


Figure 1.27: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm

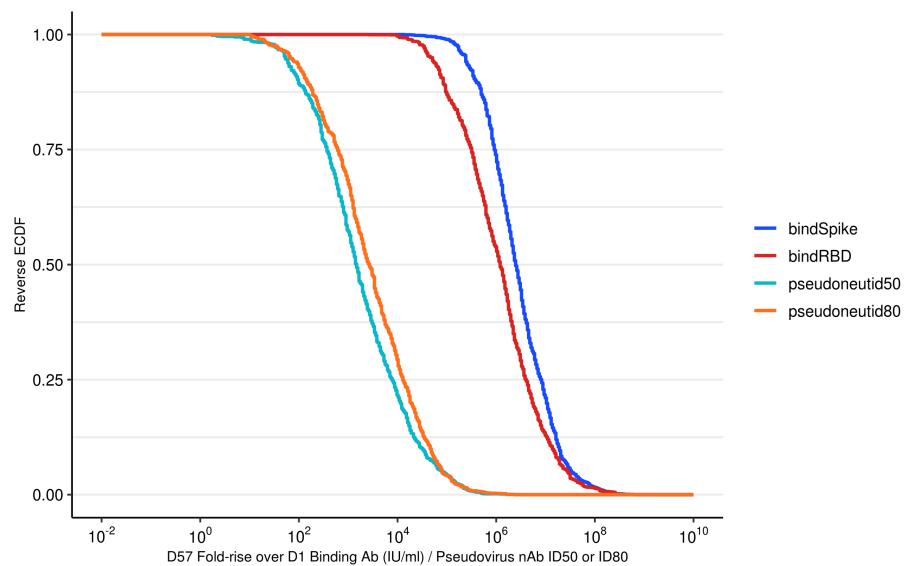


Figure 1.28: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm

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

1.3.1 Baseline SARS-CoV-2 negative

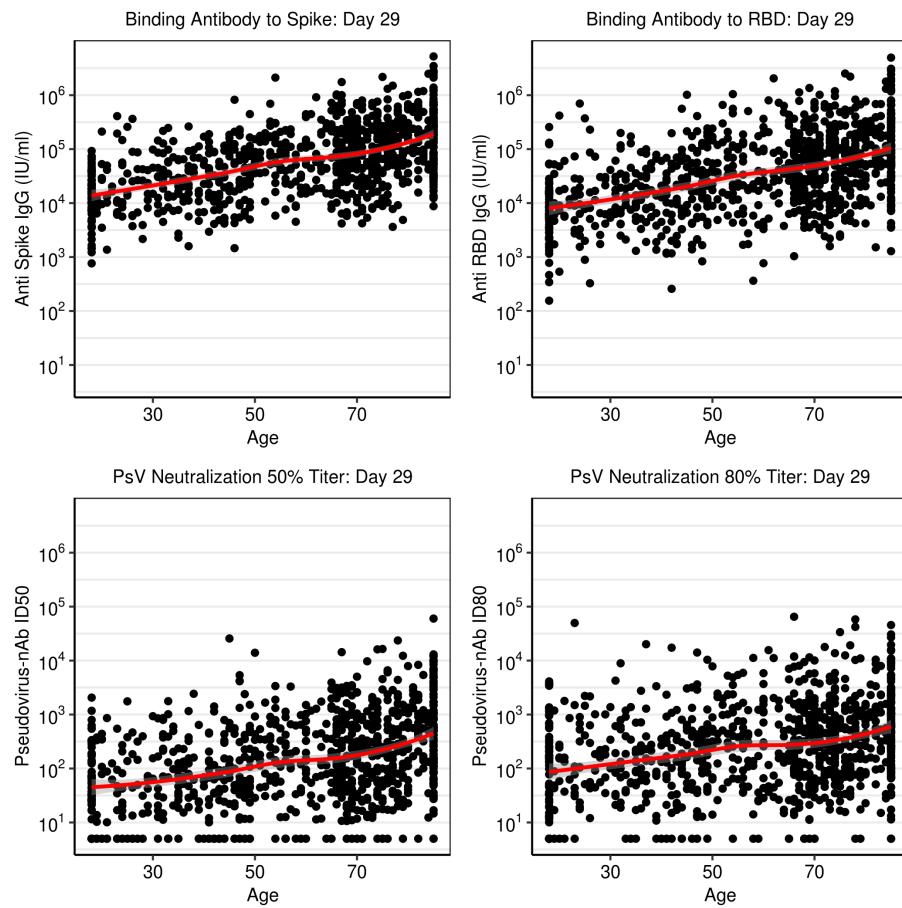


Figure 1.29: Scatter plots for D29 Ab markers vs. age: baseline negative vaccine arm

1.3. SCATTER PLOTS OF ANTIBODY MARKERS VERSUS AGE FOR OVERALL PER-PROTOCOL COHORT43

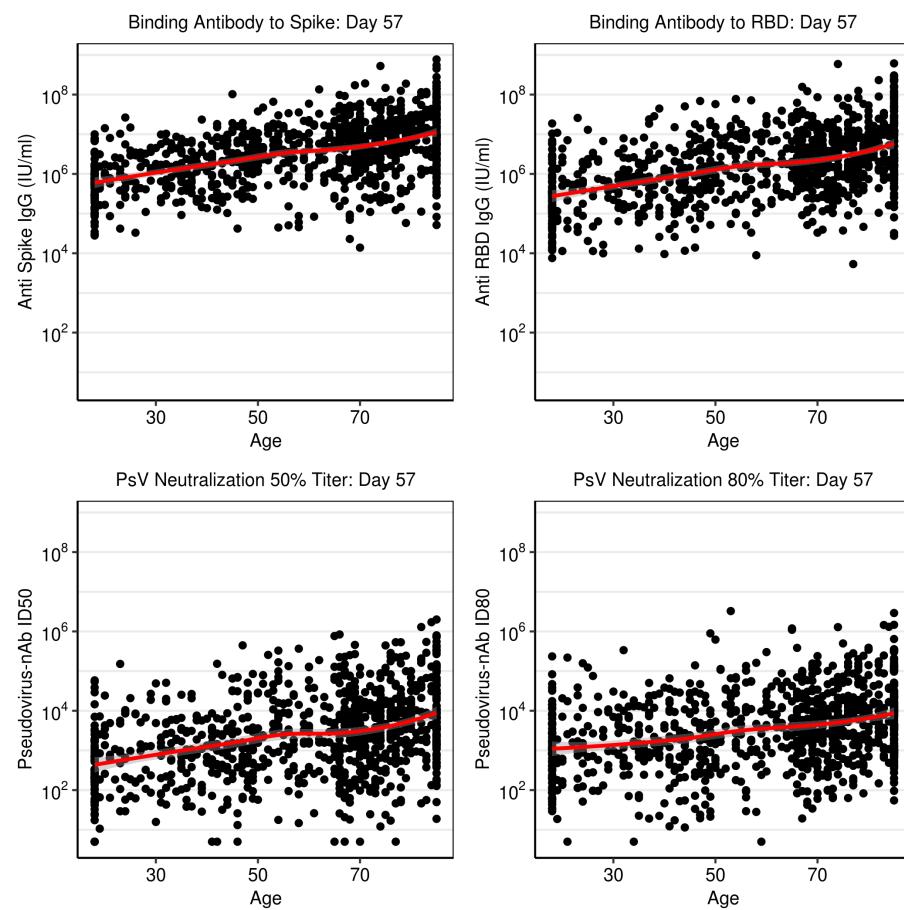


Figure 1.30: Scatter plots for D57 Ab markers vs. age: baseline negative vaccine arm

1.3.2 Baseline SARS-CoV-2 positive

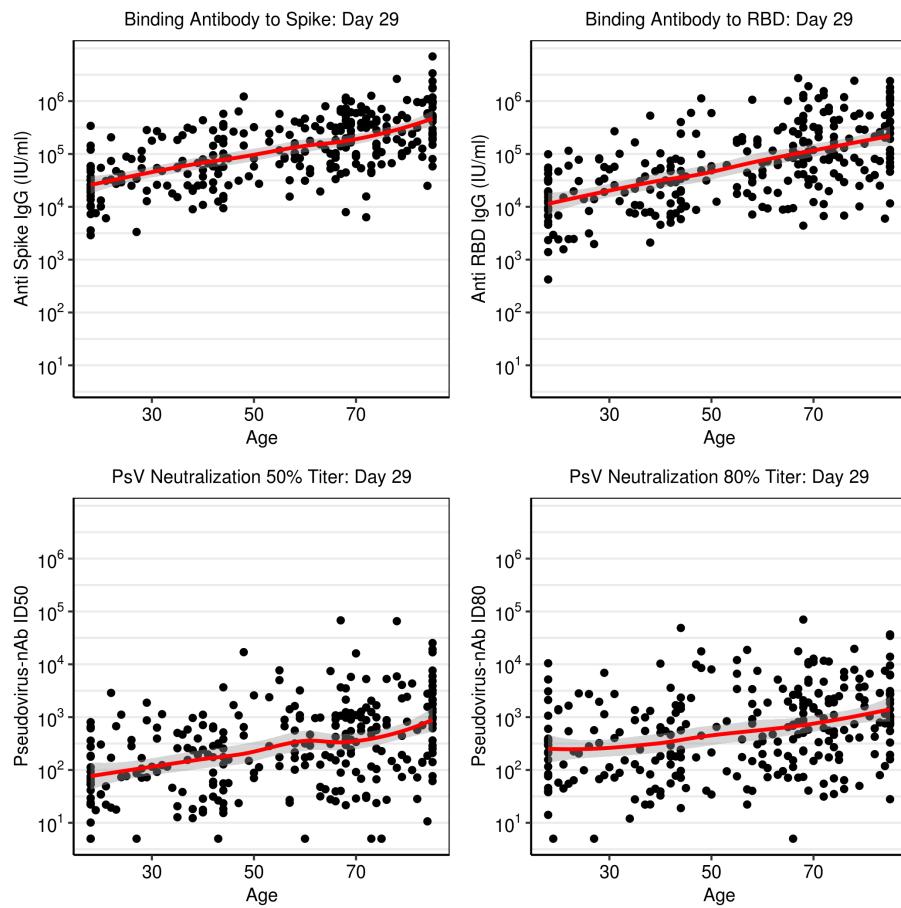


Figure 1.31: Scatter plots for D29 Ab markers vs. age: baseline positive vaccine arm

1.4. BOX PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT45

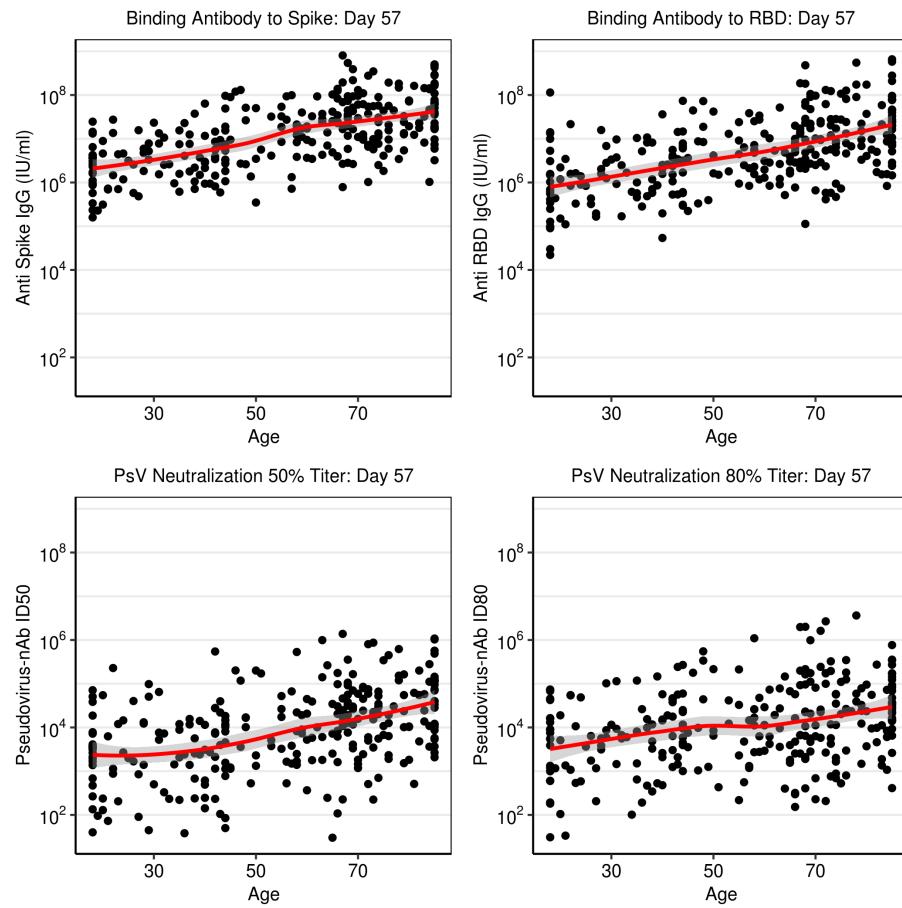


Figure 1.32: Scatter plots for D57 Ab markers vs. age: baseline positive vaccine arm

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

1.4.1 Baseline SARS-CoV-2 negative

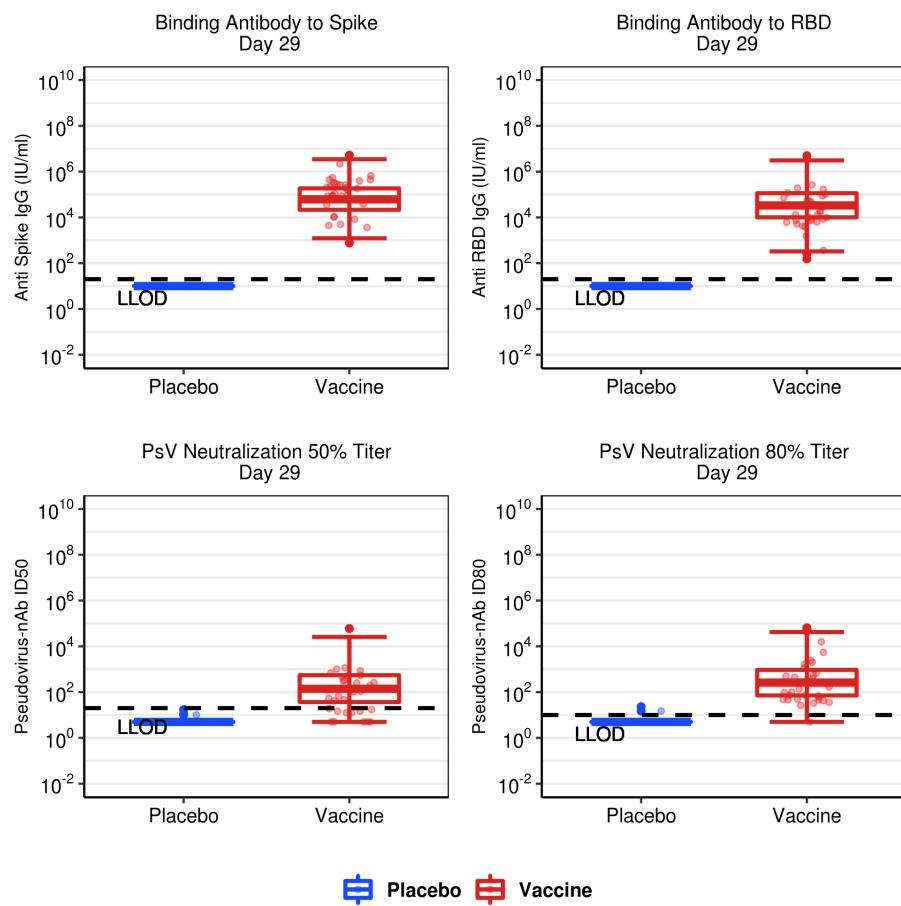


Figure 1.33: Boxplots of D29 Ab markers: baseline negative vaccine + placebo arms

1.4. BOX PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT47

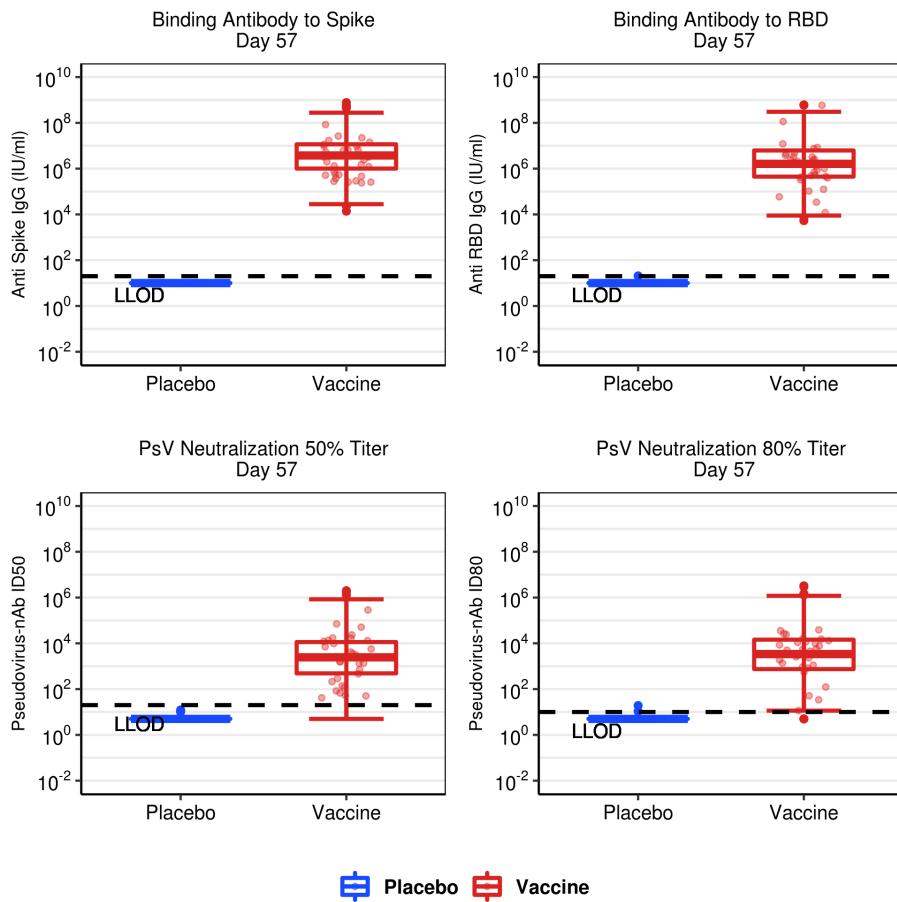


Figure 1.34: Boxplots of D57 Ab markers: baseline negative vaccine + placebo arms

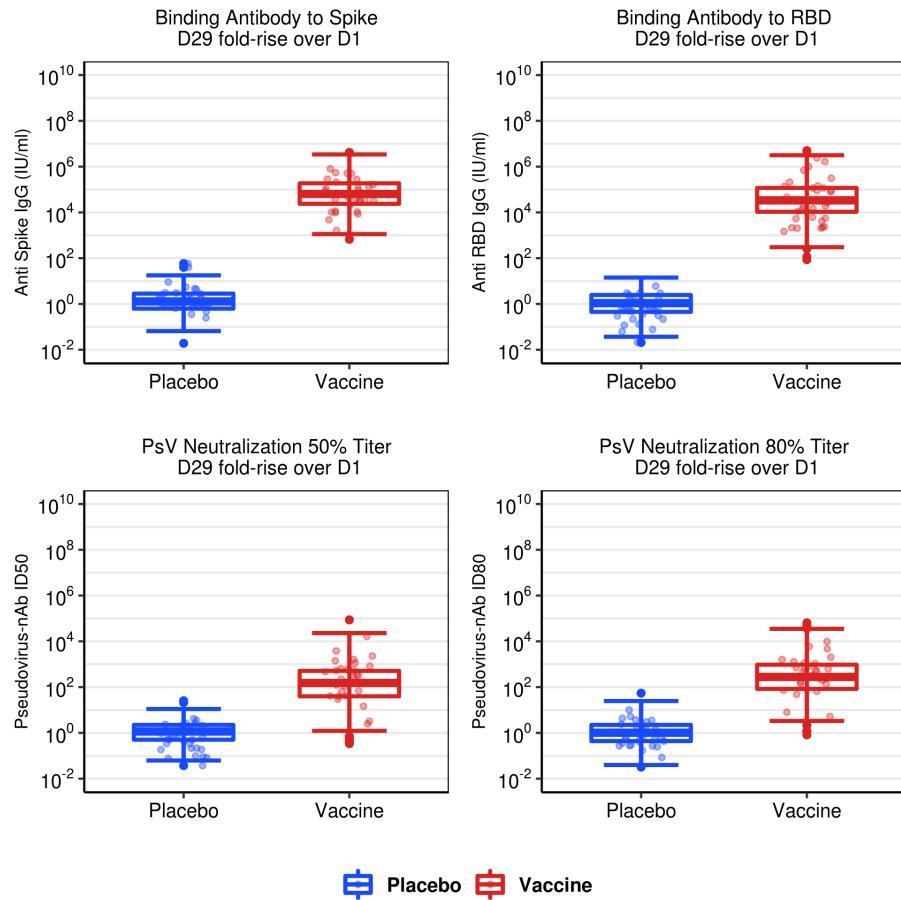


Figure 1.35: Boxplots of D29 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

1.4. BOX PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT49

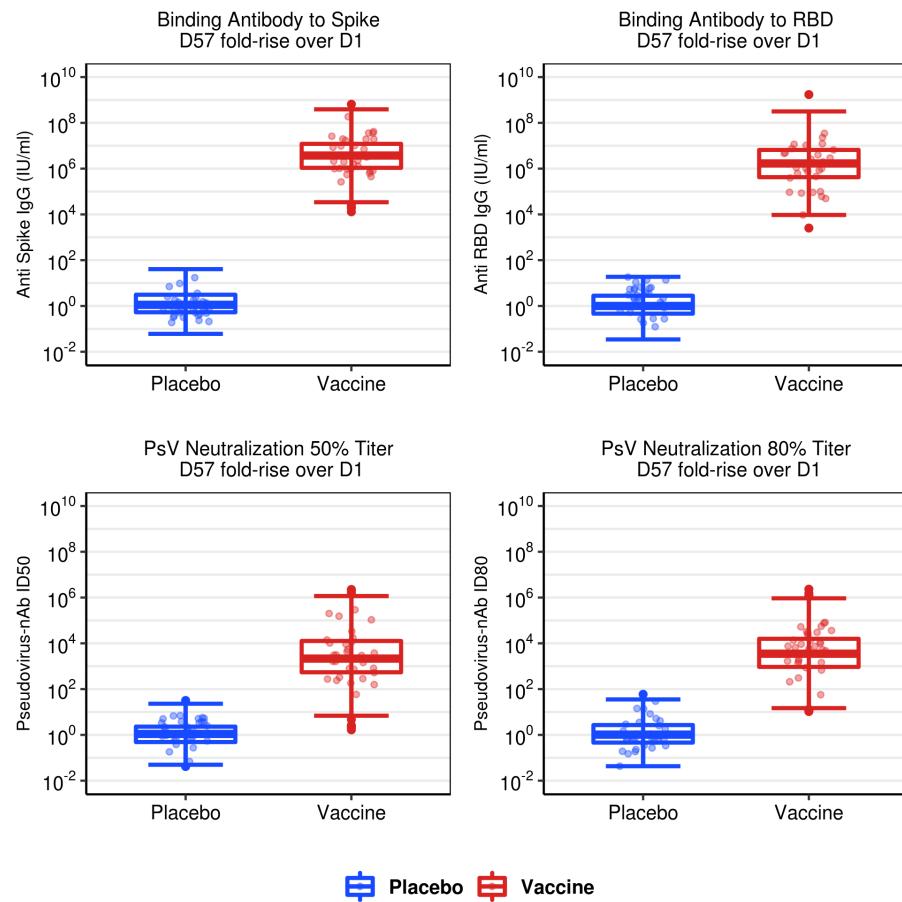


Figure 1.36: Boxplots of D57 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

1.4.2 Baseline SARS-CoV-2 positive

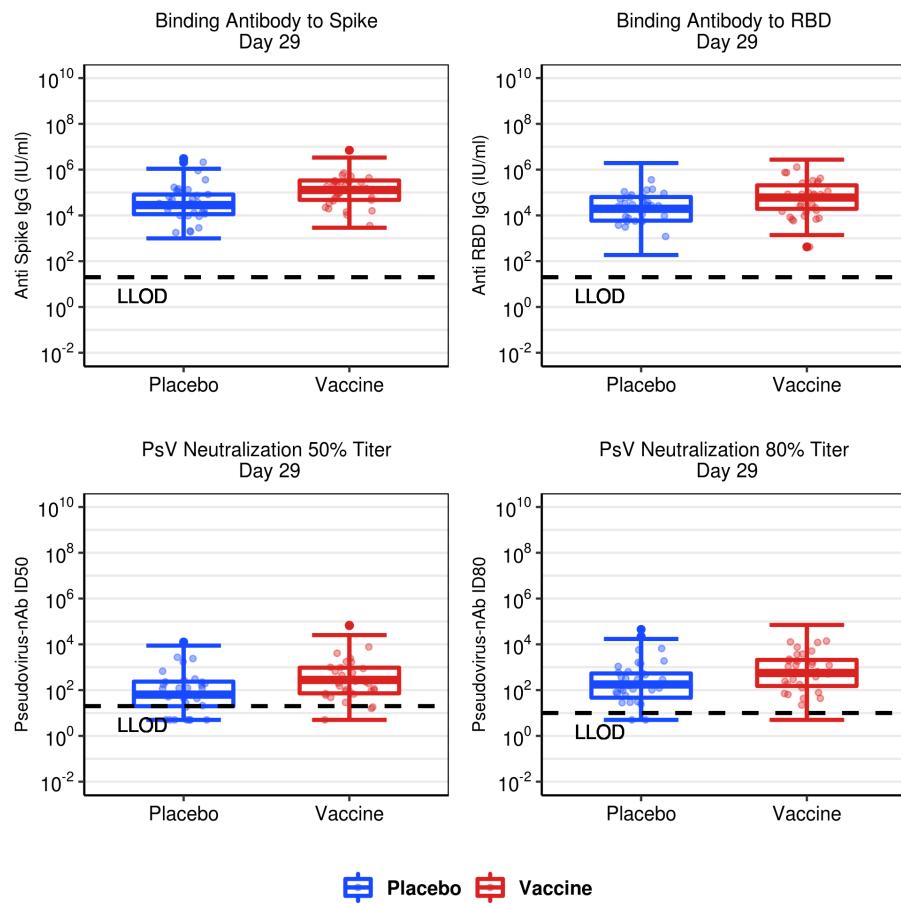


Figure 1.37: Boxplots of D29 Ab markers: baseline positive vaccine + placebo arms

1.4. BOX PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT51

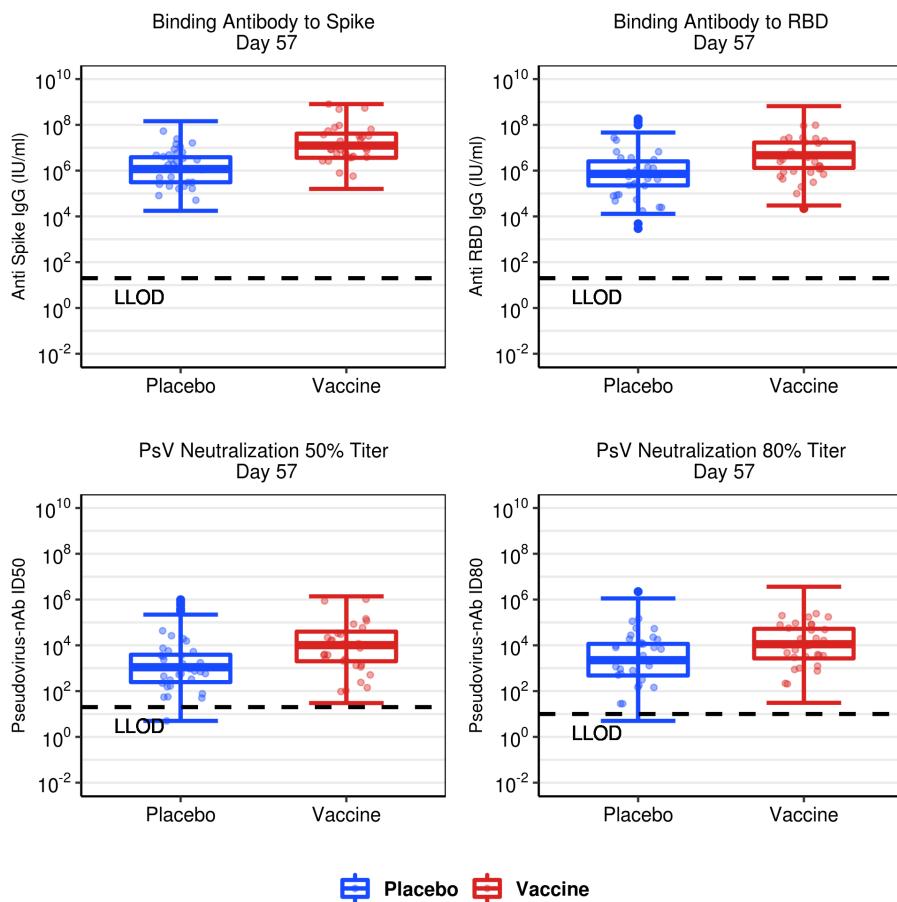


Figure 1.38: Boxplots of D57 Ab markers: baseline positive vaccine + placebo arms

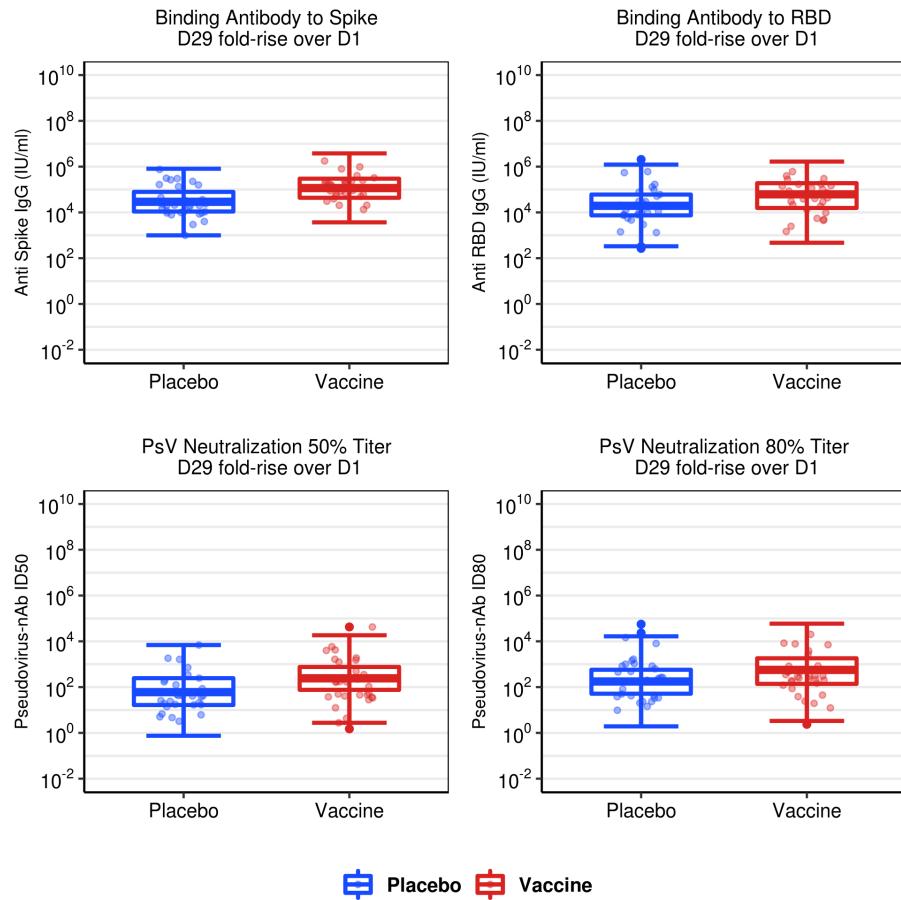


Figure 1.39: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms

1.4. BOX PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT53

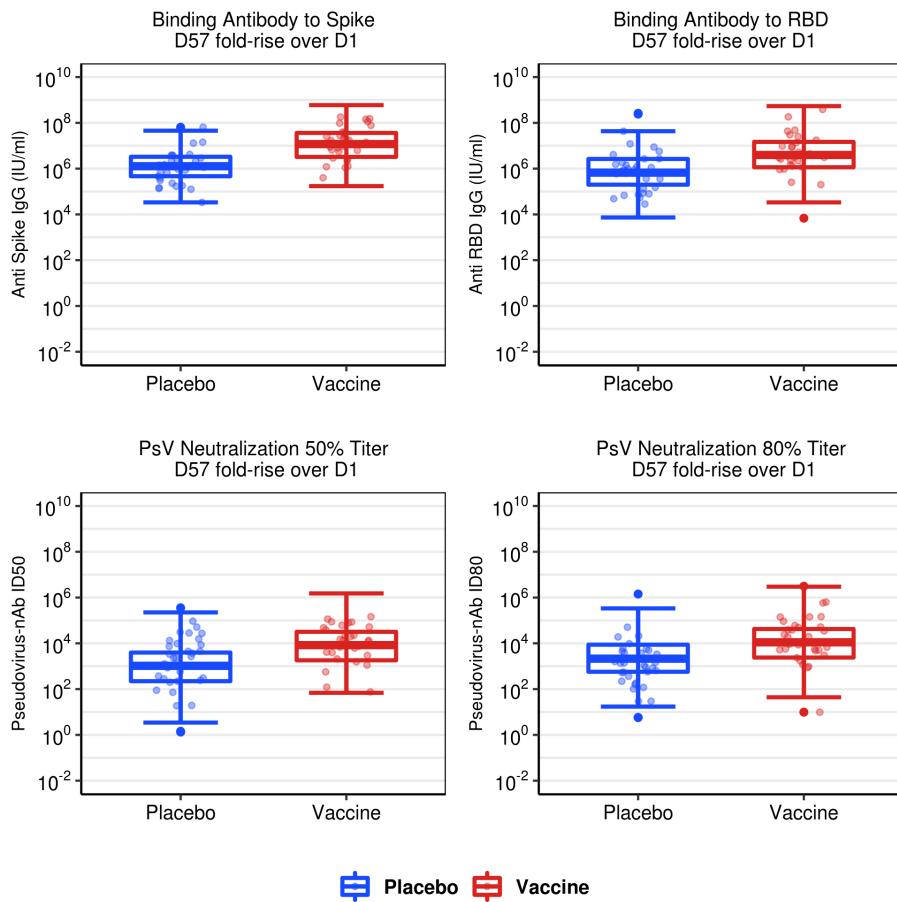


Figure 1.40: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms

1.4.3 Baseline negative vs. positive vaccine recipients

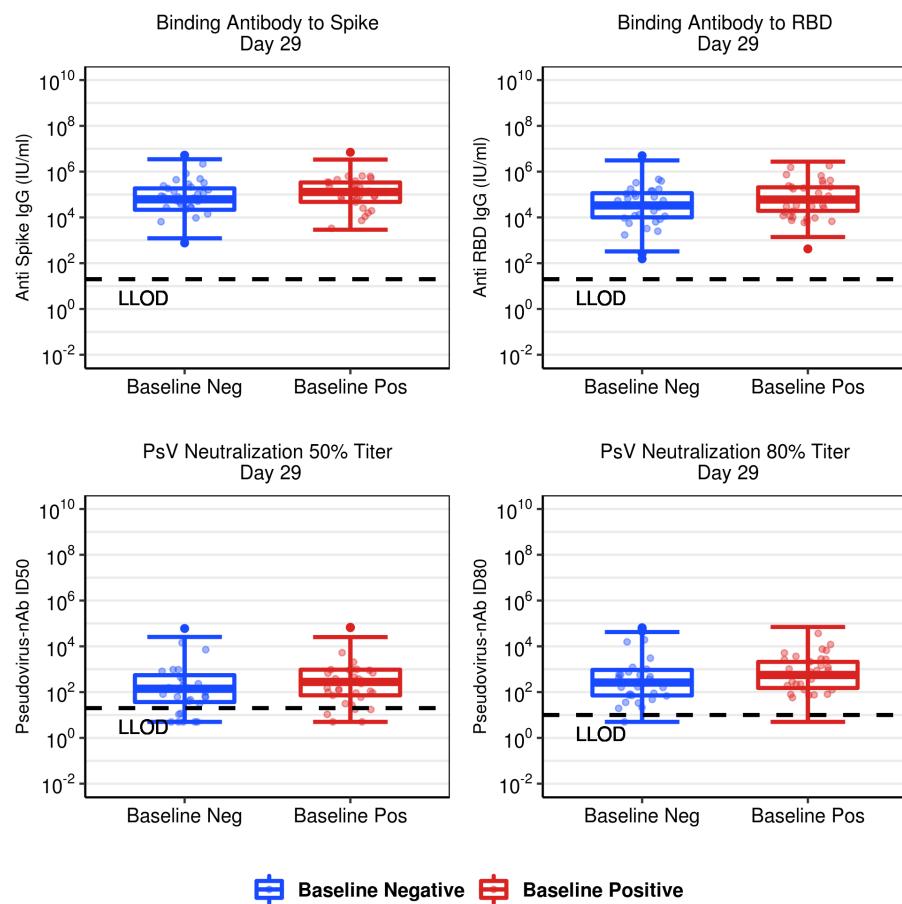


Figure 1.41: Boxplots of D29 Ab markers: baseline positive + negative vaccine arm

1.4. BOX PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT55

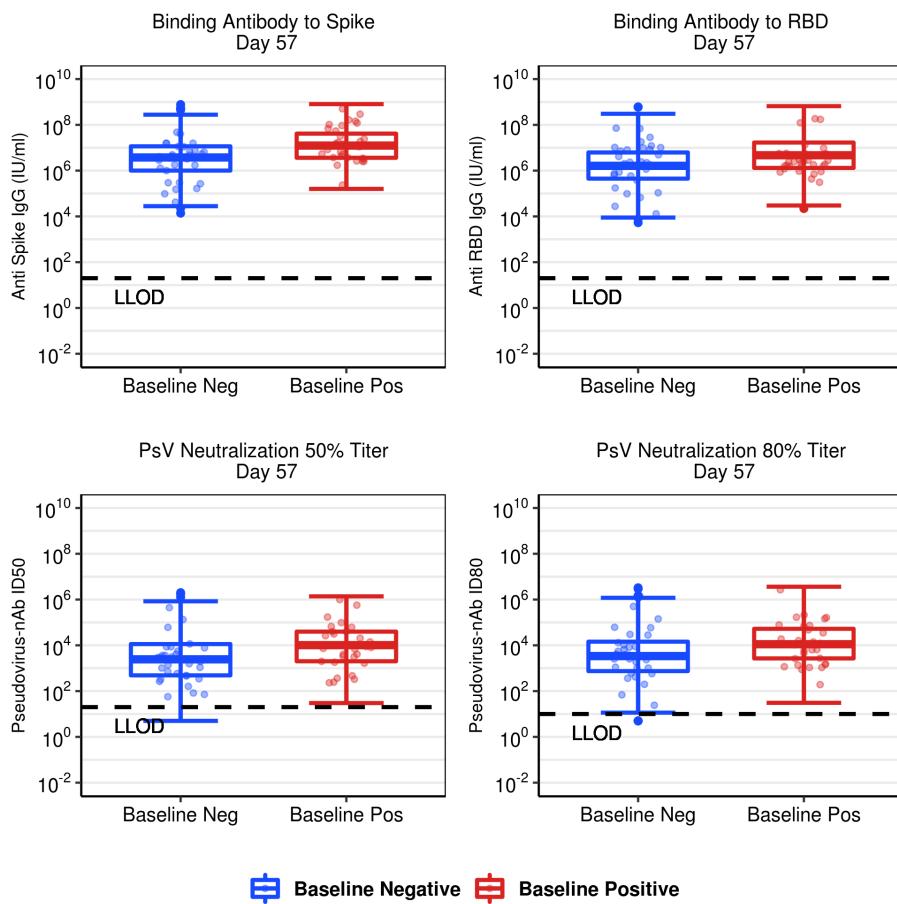


Figure 1.42: Boxplots of D57 Ab markers: baseline positive + negative vaccine arm

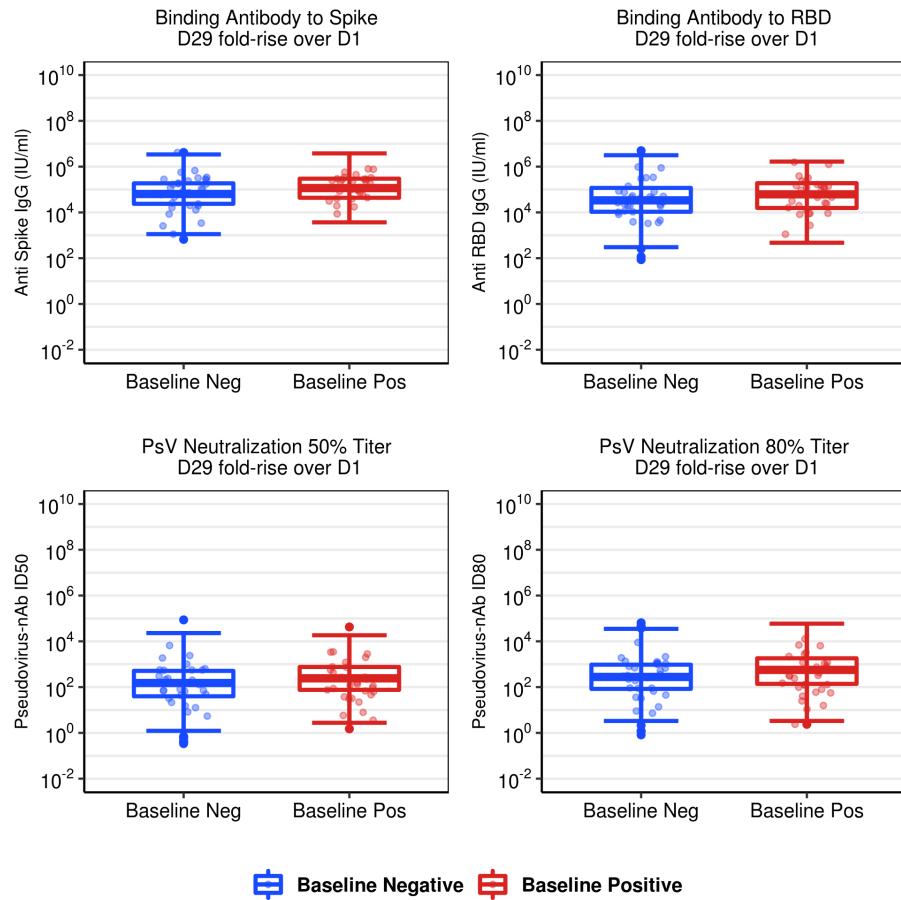


Figure 1.43: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm

1.4. BOX PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT57

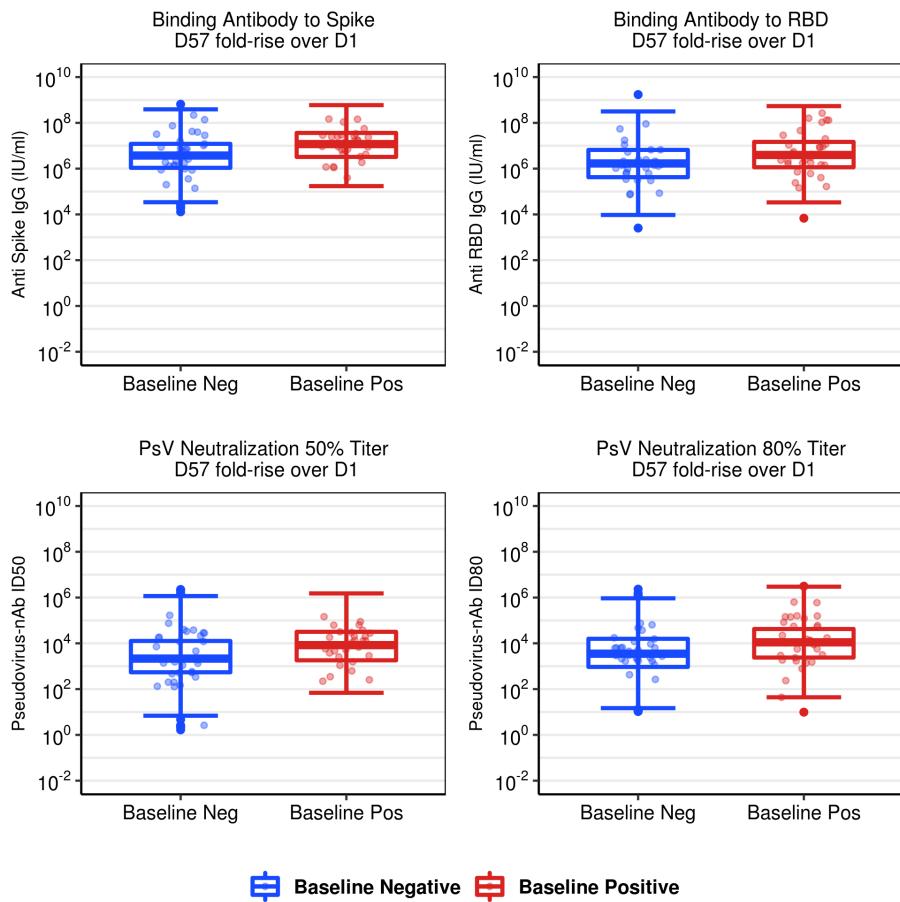


Figure 1.44: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm

1.4.4 Baseline negative vs. positive placebo recipients

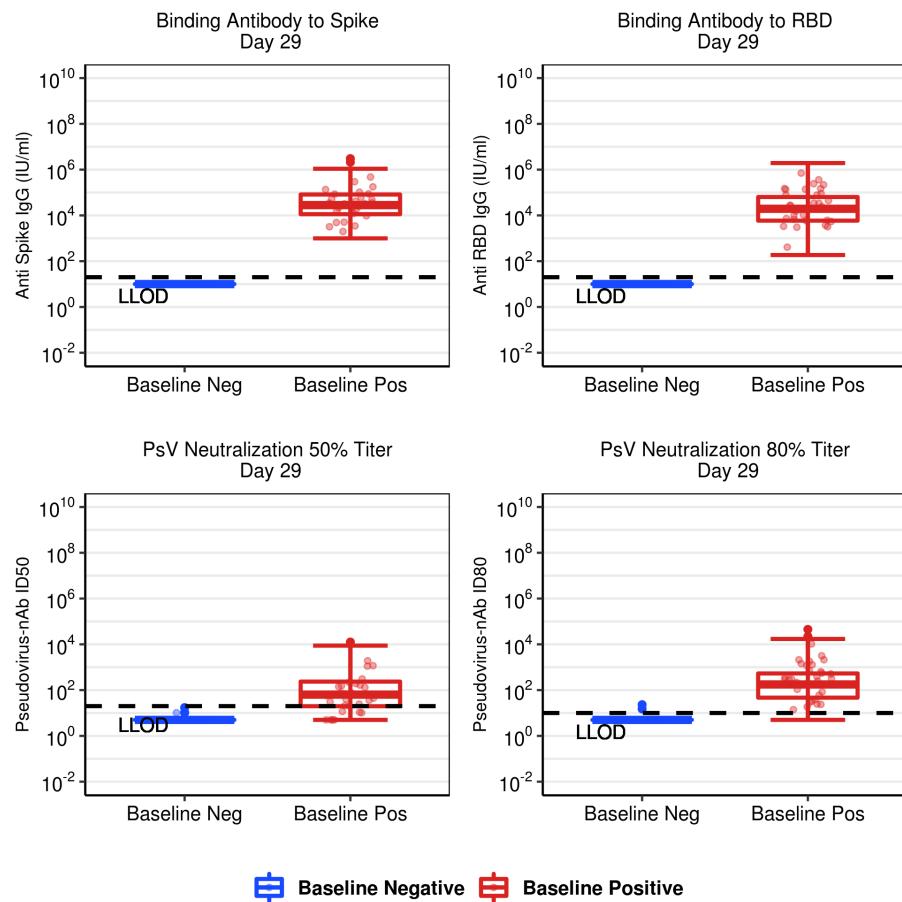


Figure 1.45: Boxplots of D29 Ab markers: baseline positive + negative placebo arm

1.4. BOX PLOTS OF ANTIBODY MARKERS FOR OVERALL PER-PROTOCOL COHORT59

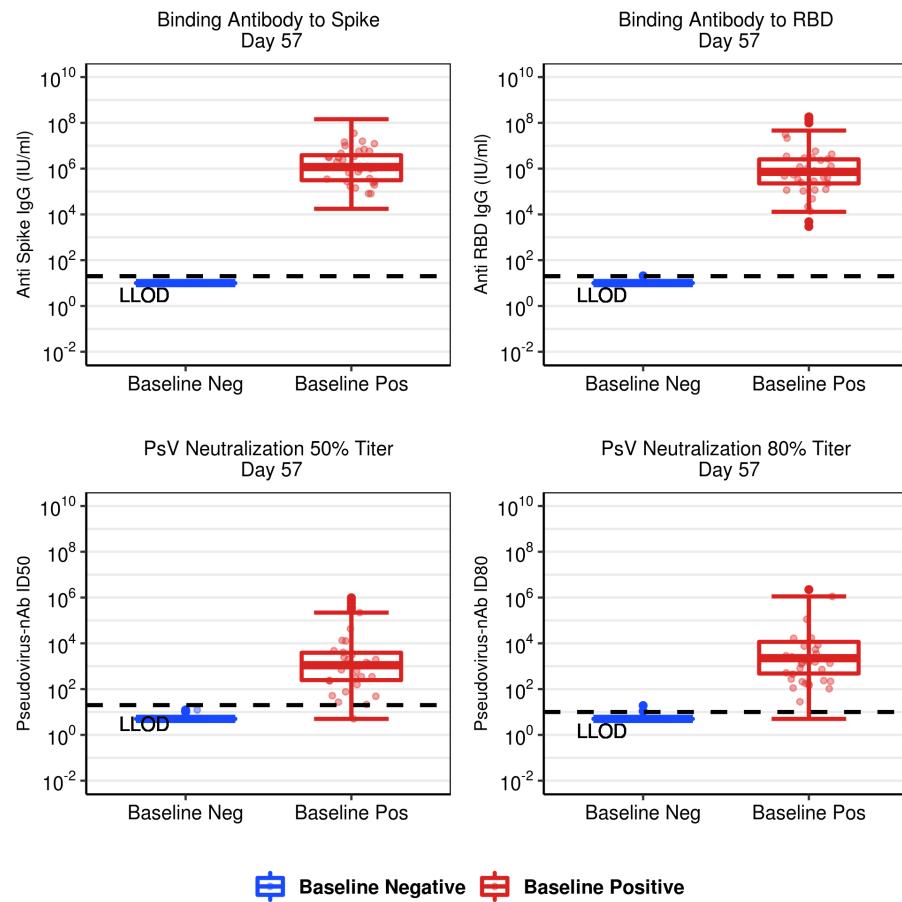


Figure 1.46: Boxplots of D57 Ab markers: baseline positive + negative placebo arm

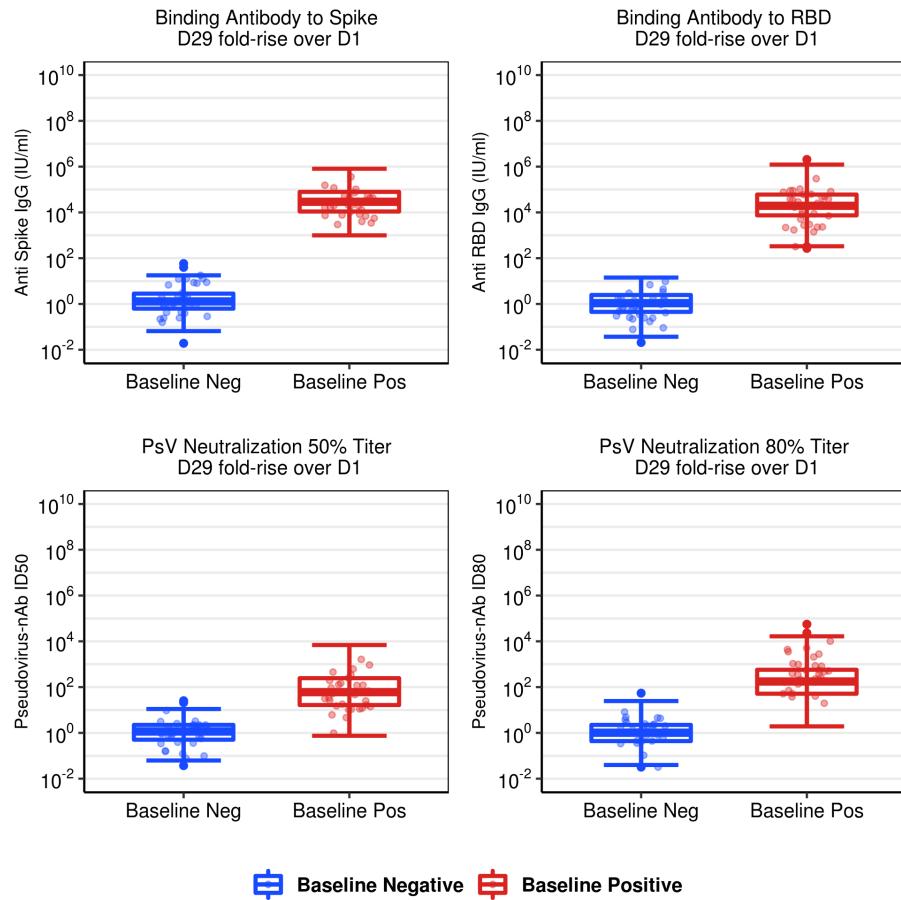


Figure 1.47: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

1.5. SPAGHETTI PLOTS OF ANTIBODY MARKERS OVER TIME FOR THE OVERALL PER-PROTOCOL COHORT6

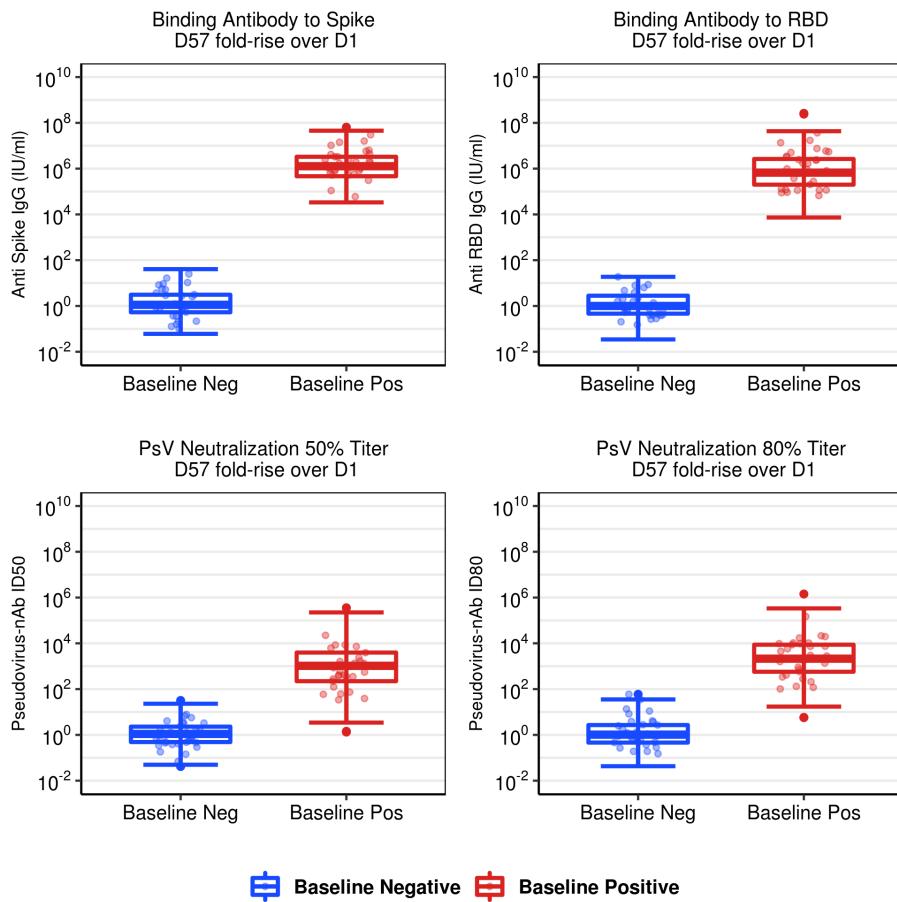


Figure 1.48: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

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

1.5.1 Baseline SARS-CoV-2 negative

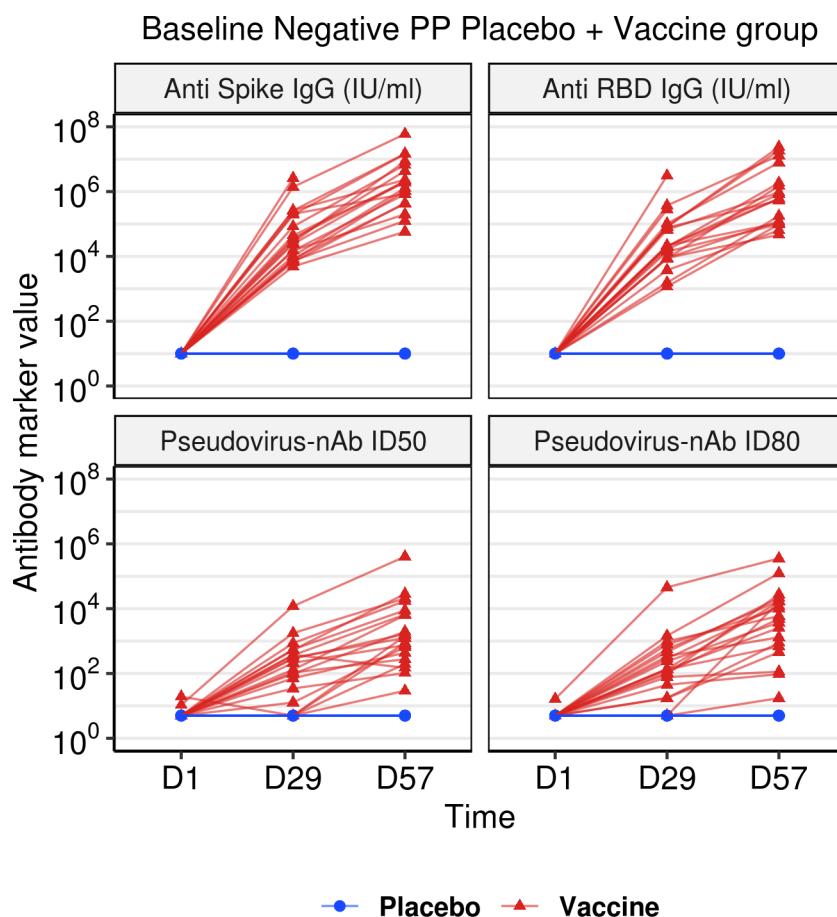


Figure 1.49: Spaghetti plots of Ab markers over time: baseline negative vaccine + placebo arm

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT63

1.5.2 Baseline SARS-CoV-2 positive

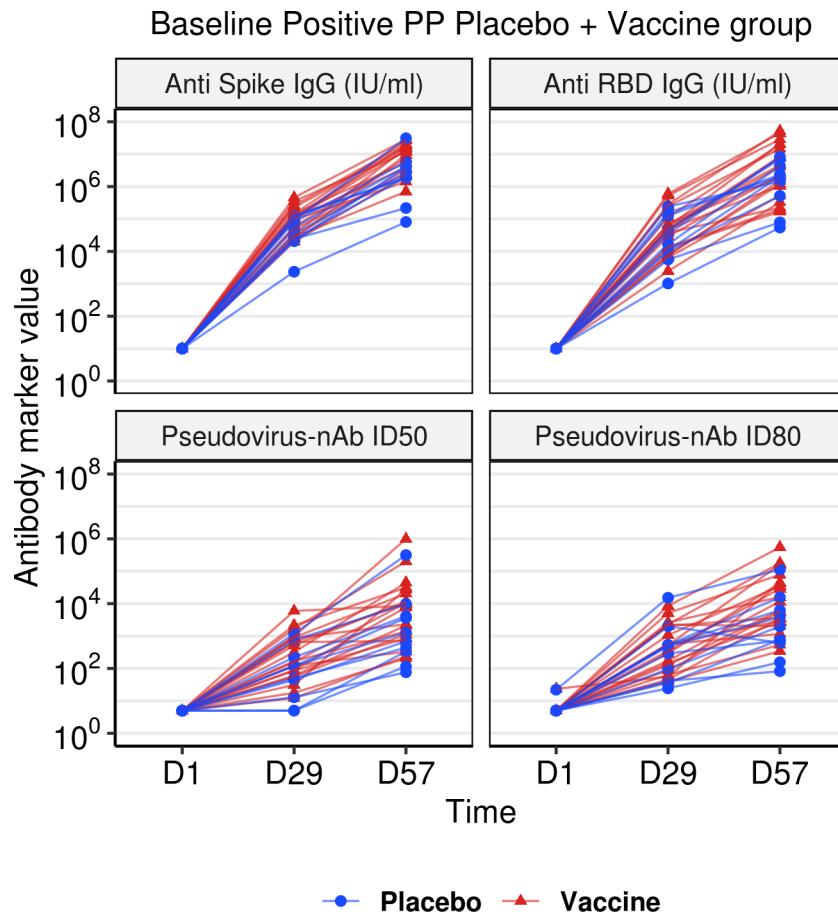


Figure 1.50: Spaghetti plots of Ab markers over time: baseline positive vaccine + placebo arm

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

1.6.1 Baseline SARS-CoV-2 negative

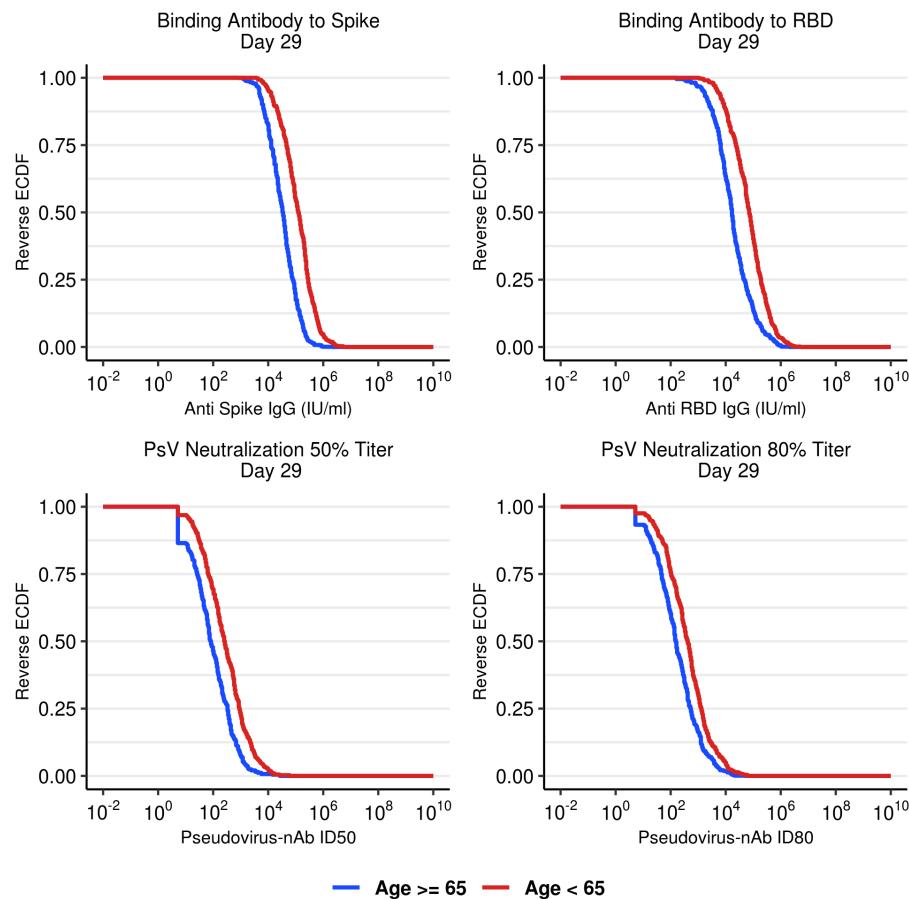


Figure 1.51: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age groups.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT65

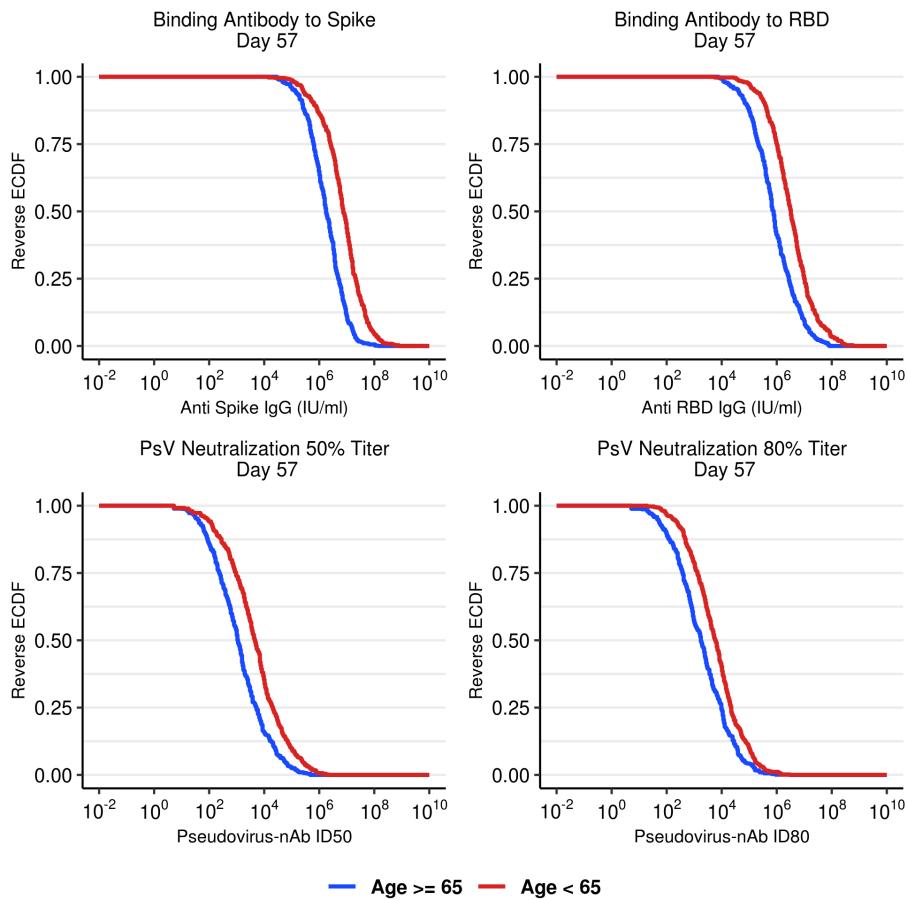


Figure 1.52: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age groups.

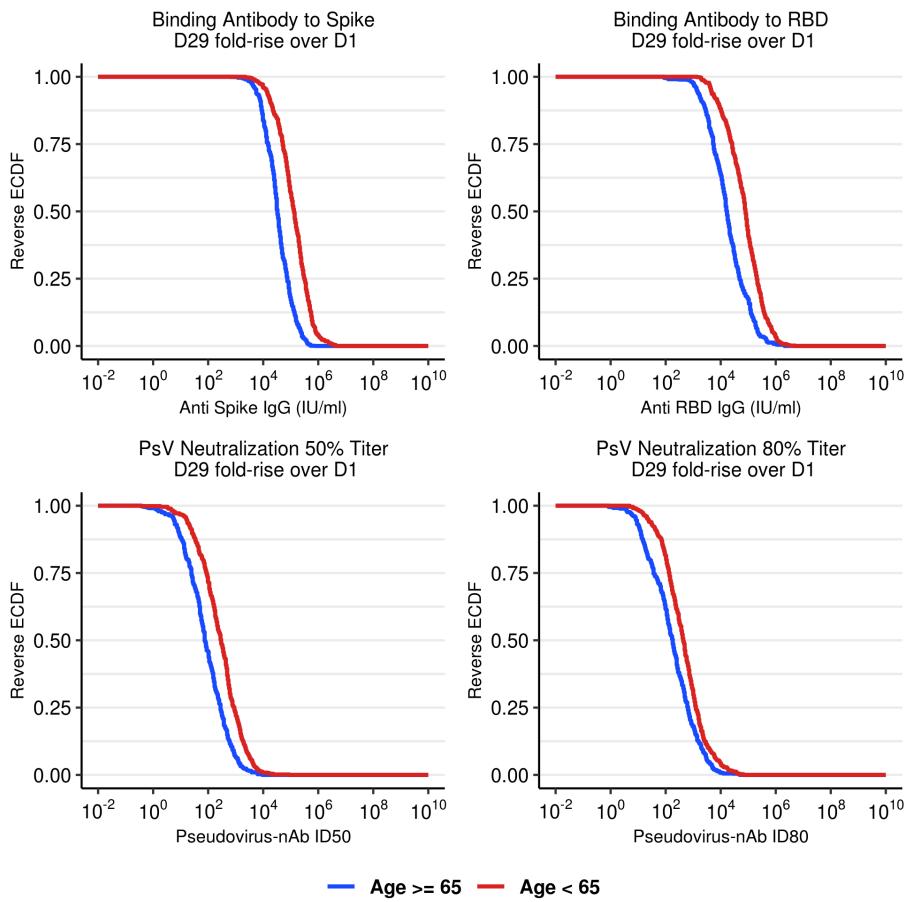


Figure 1.53: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT67

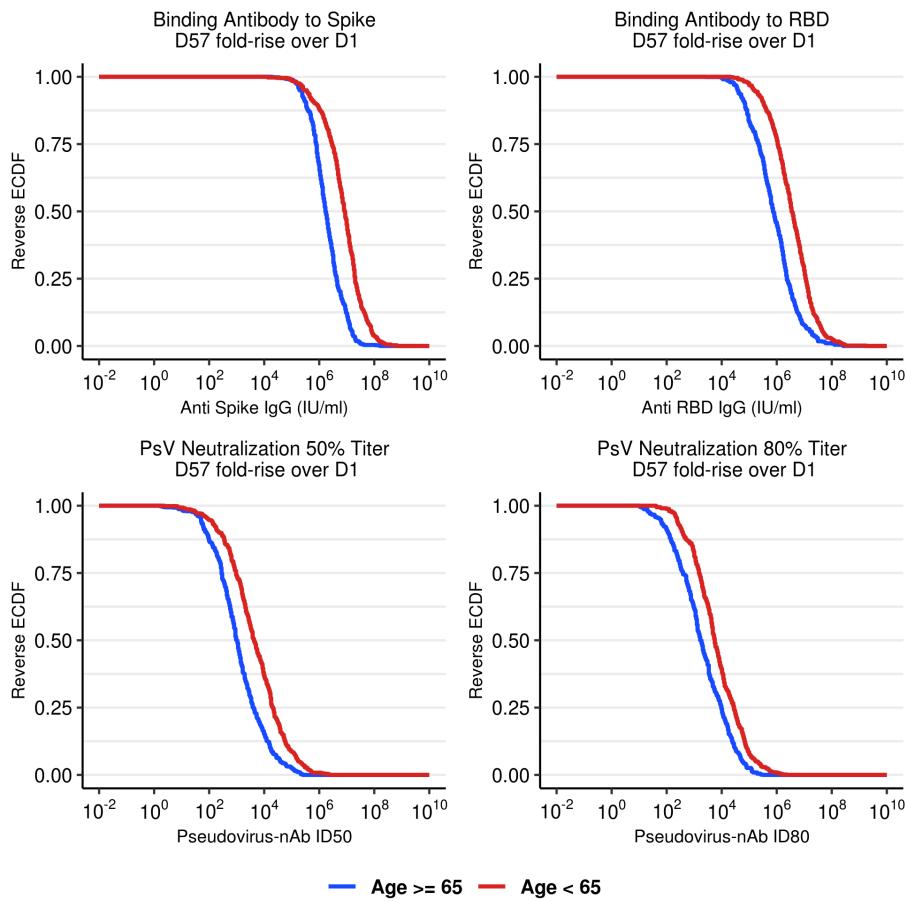


Figure 1.54: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

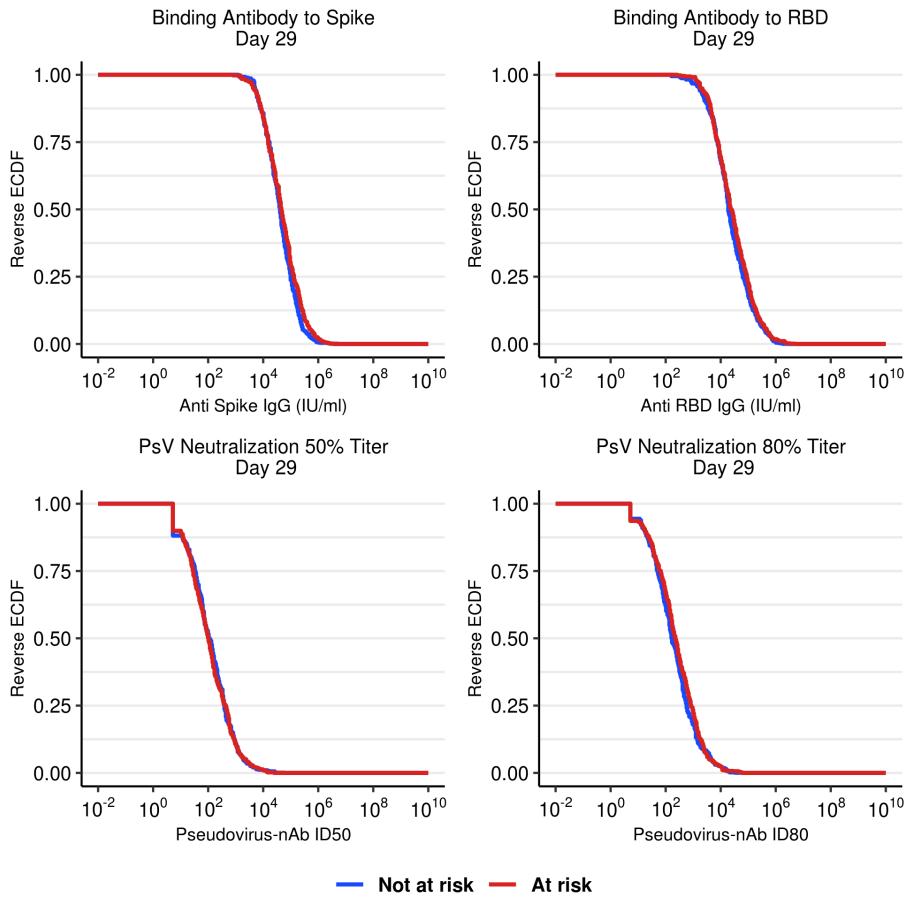


Figure 1.55: RCDF plots for D29 Ab markers: baseline negative vaccine arm by high-risk condition.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT69

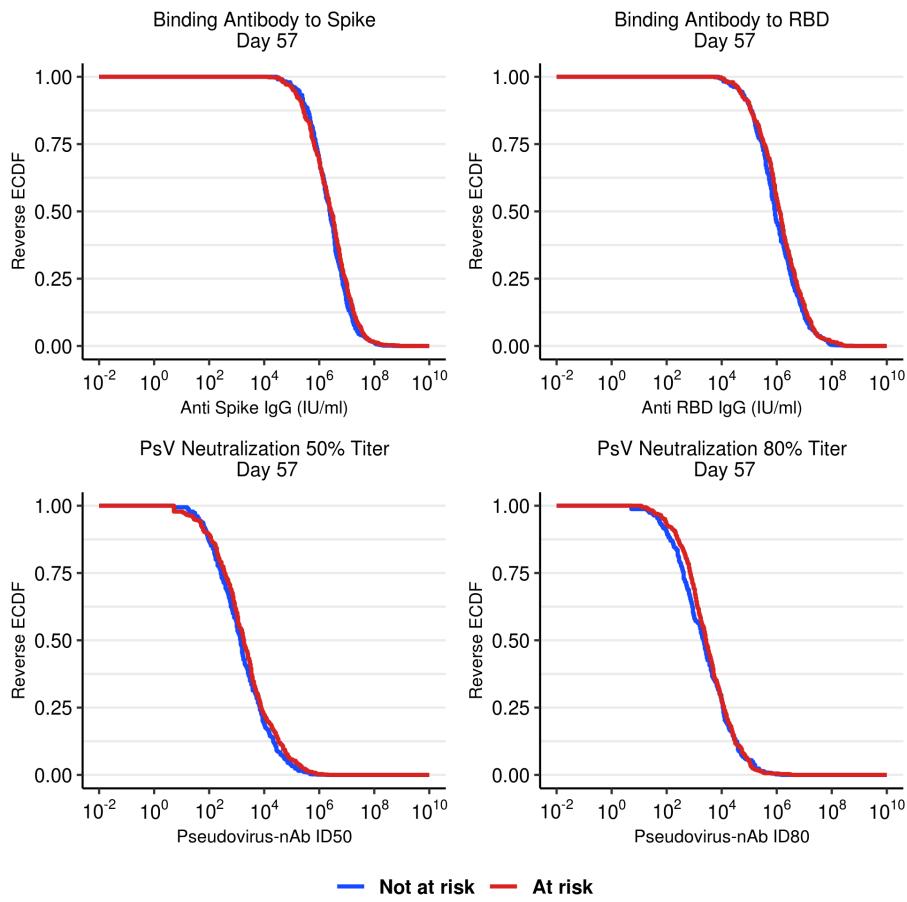


Figure 1.56: RCDF plots for D57 Ab markers: baseline negative vaccine arm by high-risk condition.

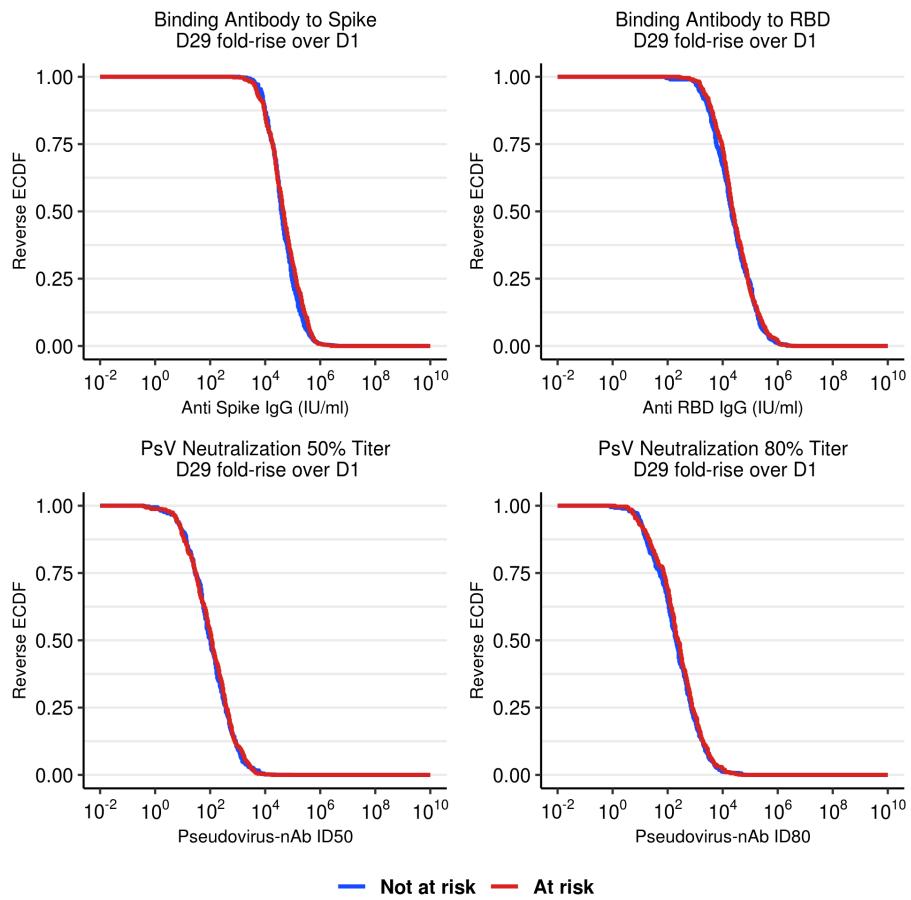


Figure 1.57: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT71

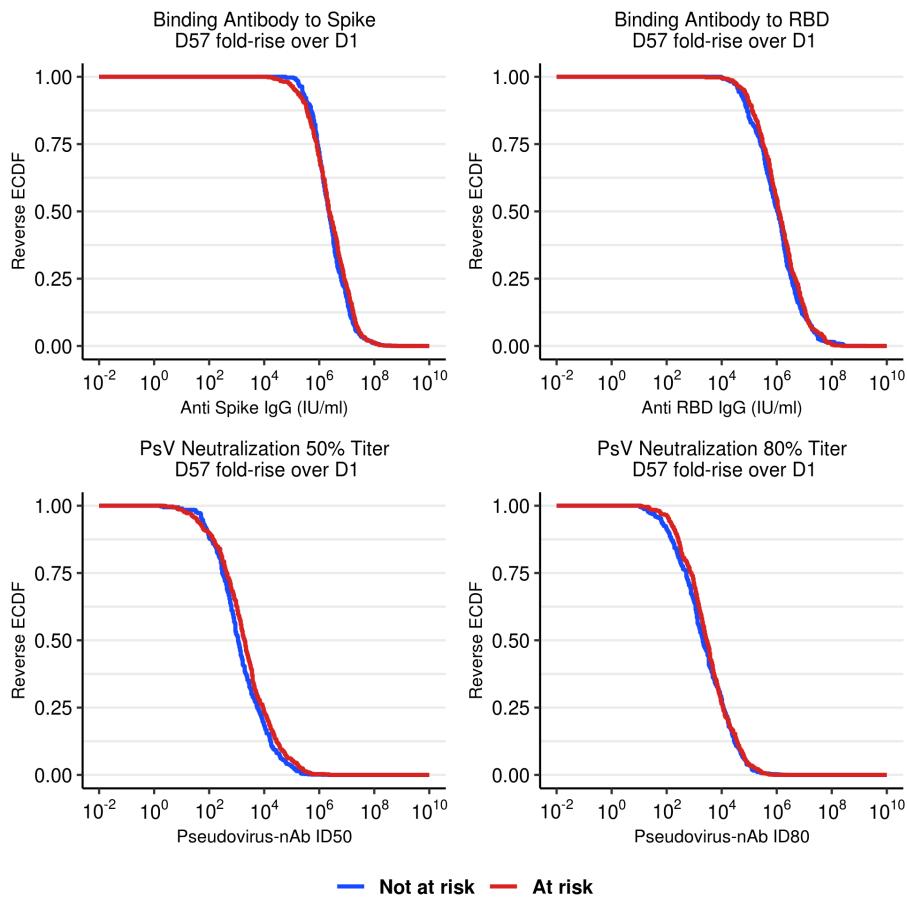


Figure 1.58: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

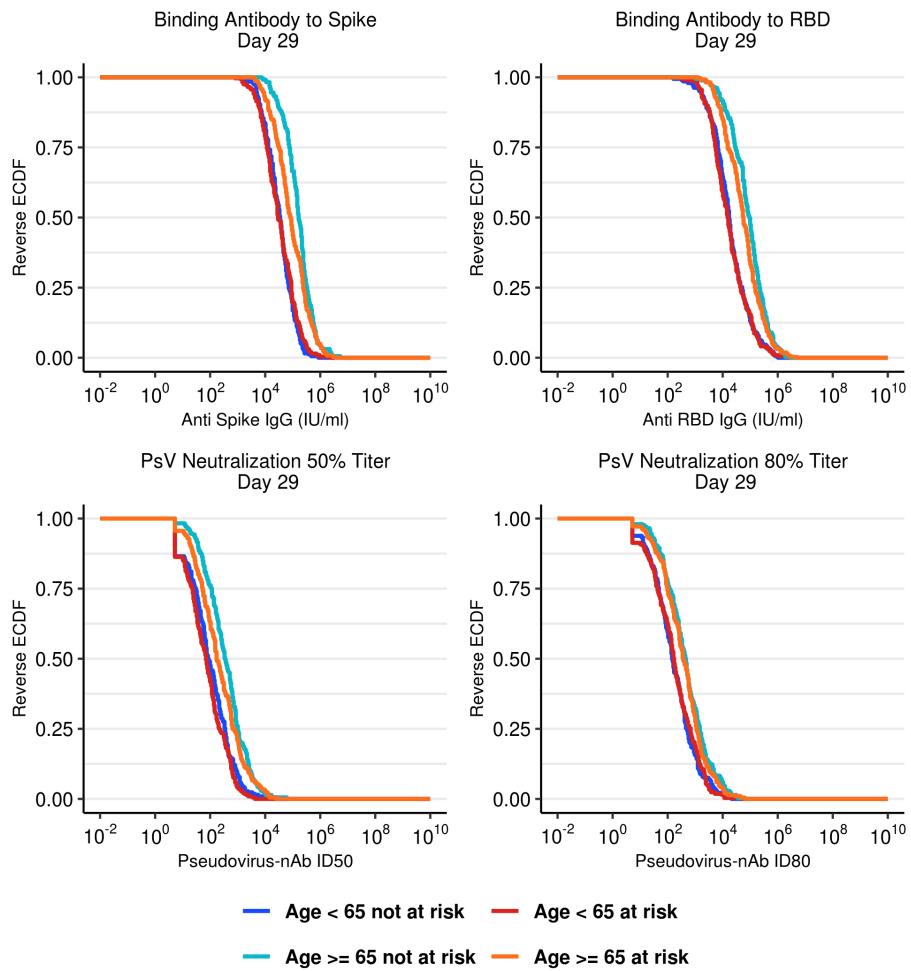


Figure 1.59: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and high-risk condition.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT73

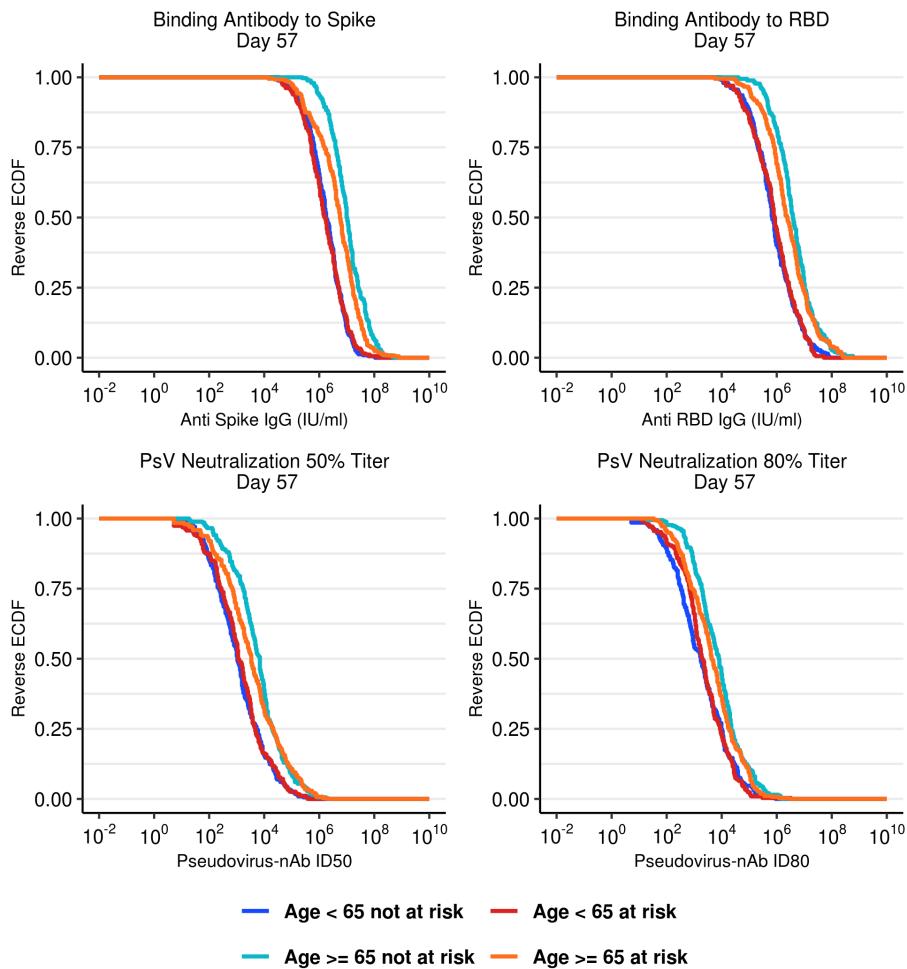


Figure 1.60: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and high-risk condition.

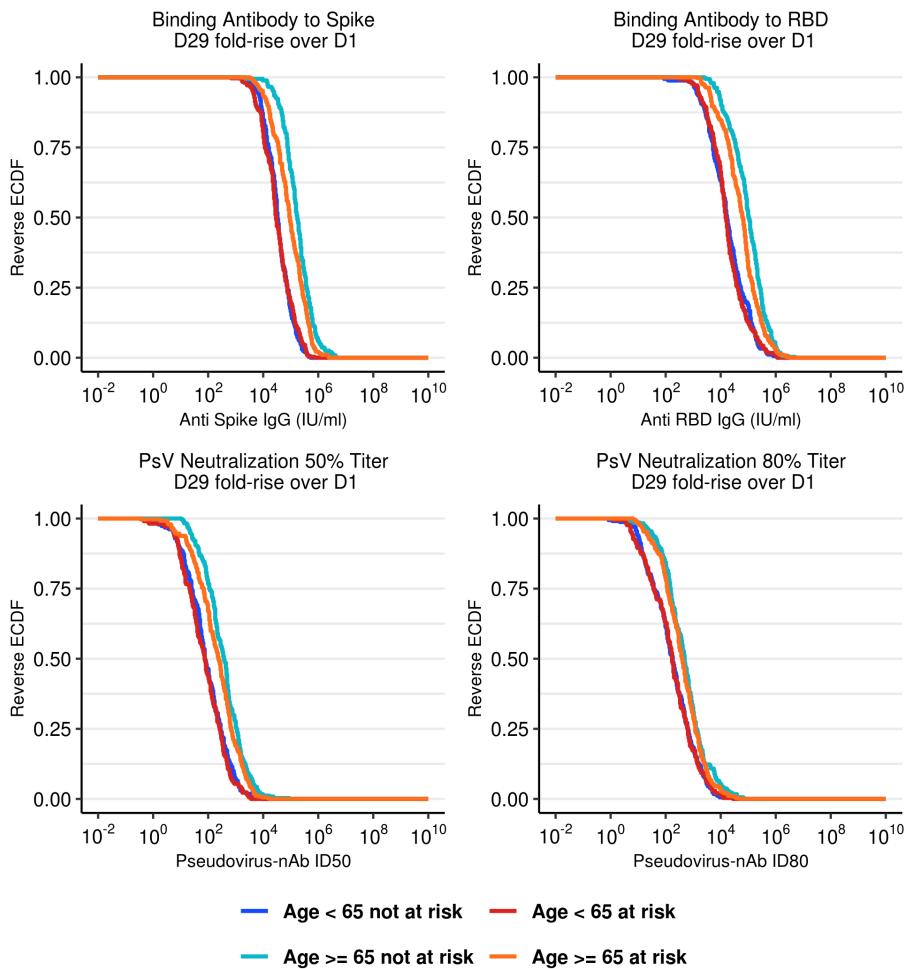


Figure 1.61: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT75

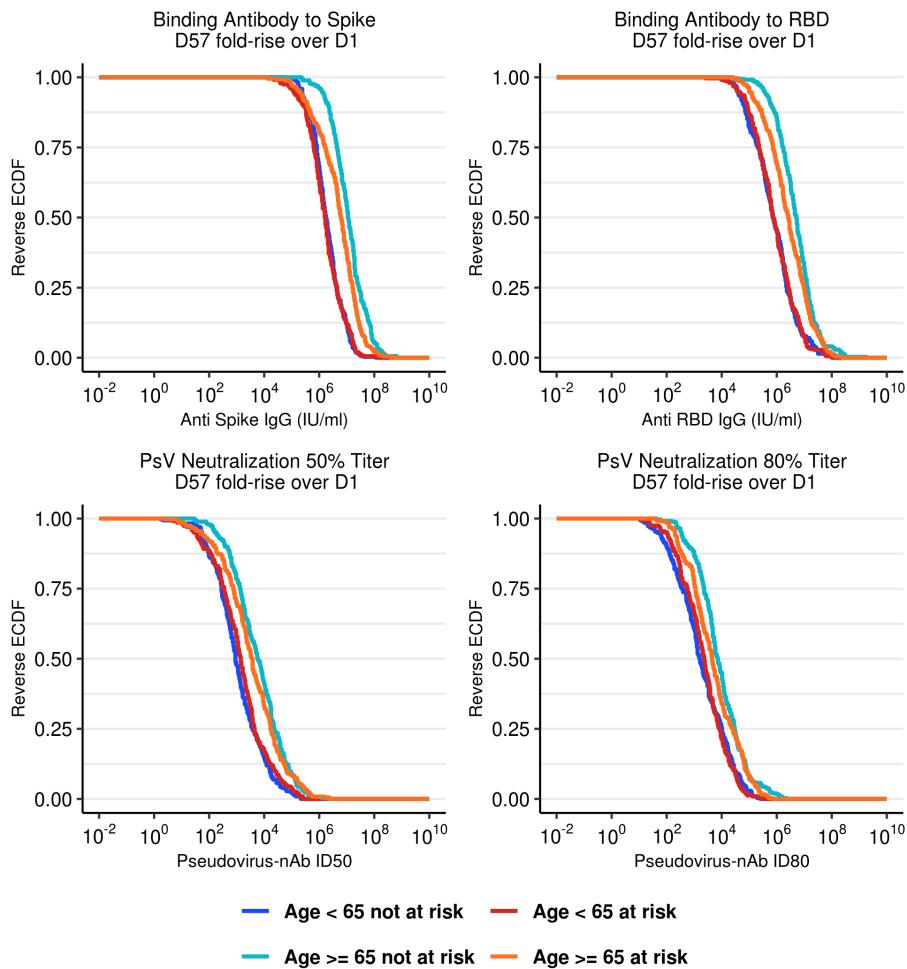


Figure 1.62: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.

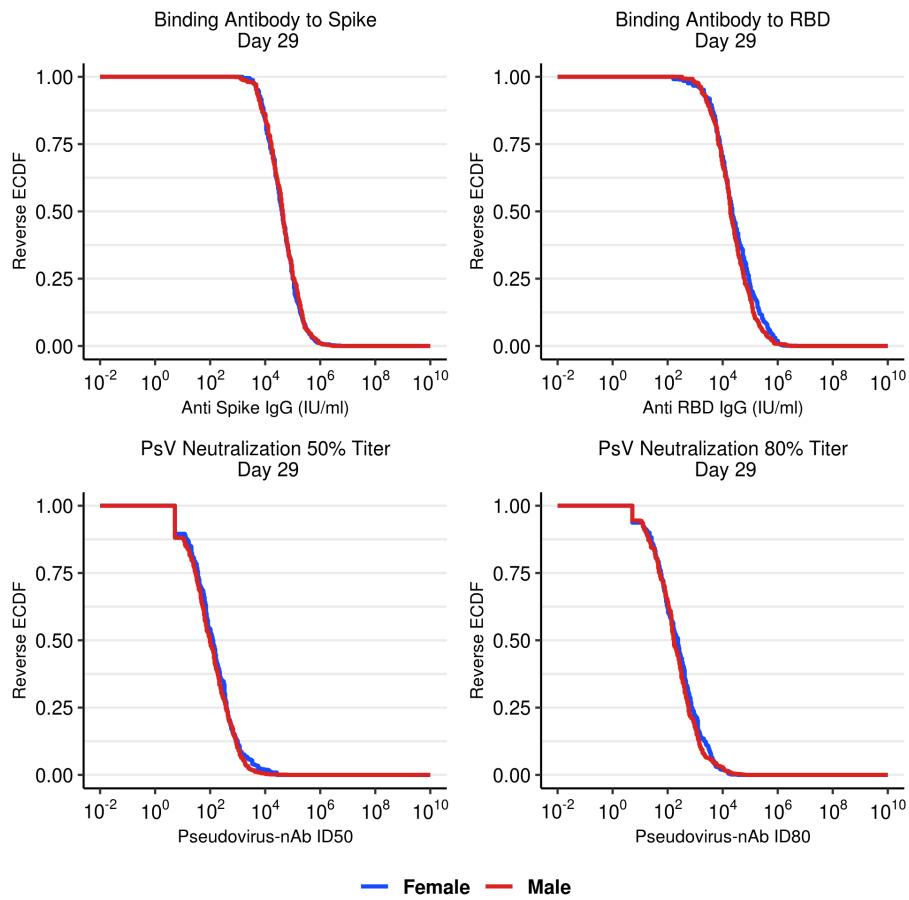


Figure 1.63: RCDF plots for D29 Ab markers: baseline negative vaccine arm by sex assigned at birth.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT77

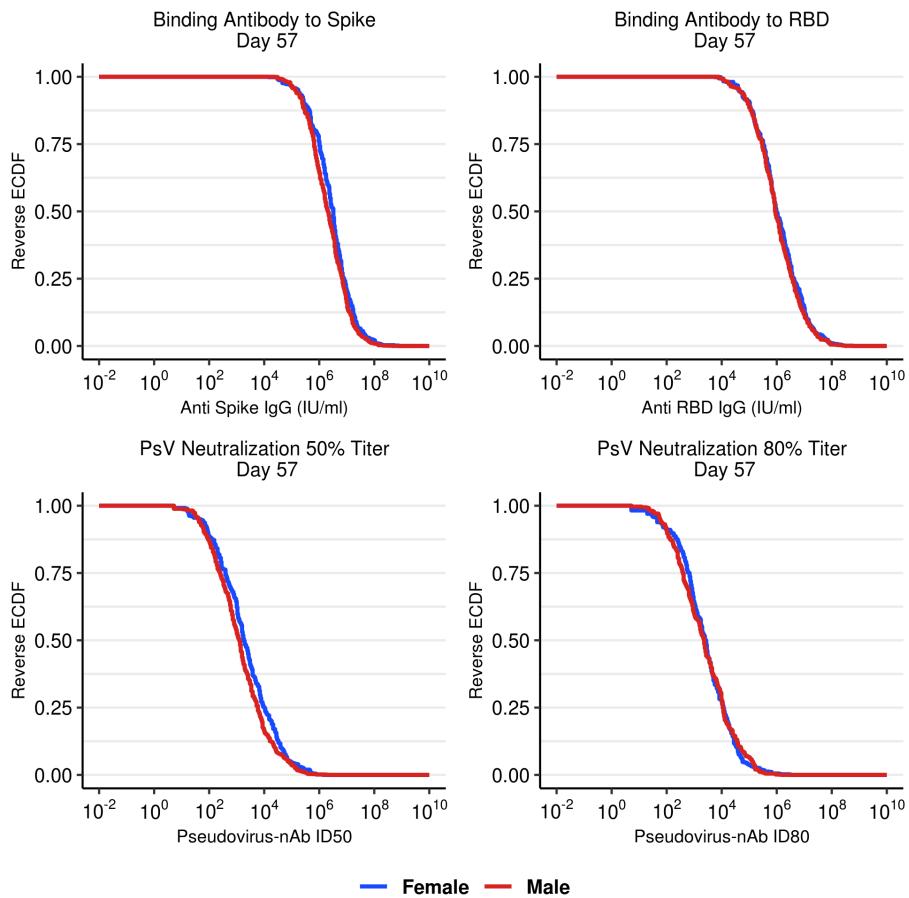


Figure 1.64: RCDF plots for D57 Ab markers: baseline negative vaccine arm by sex assigned at birth.

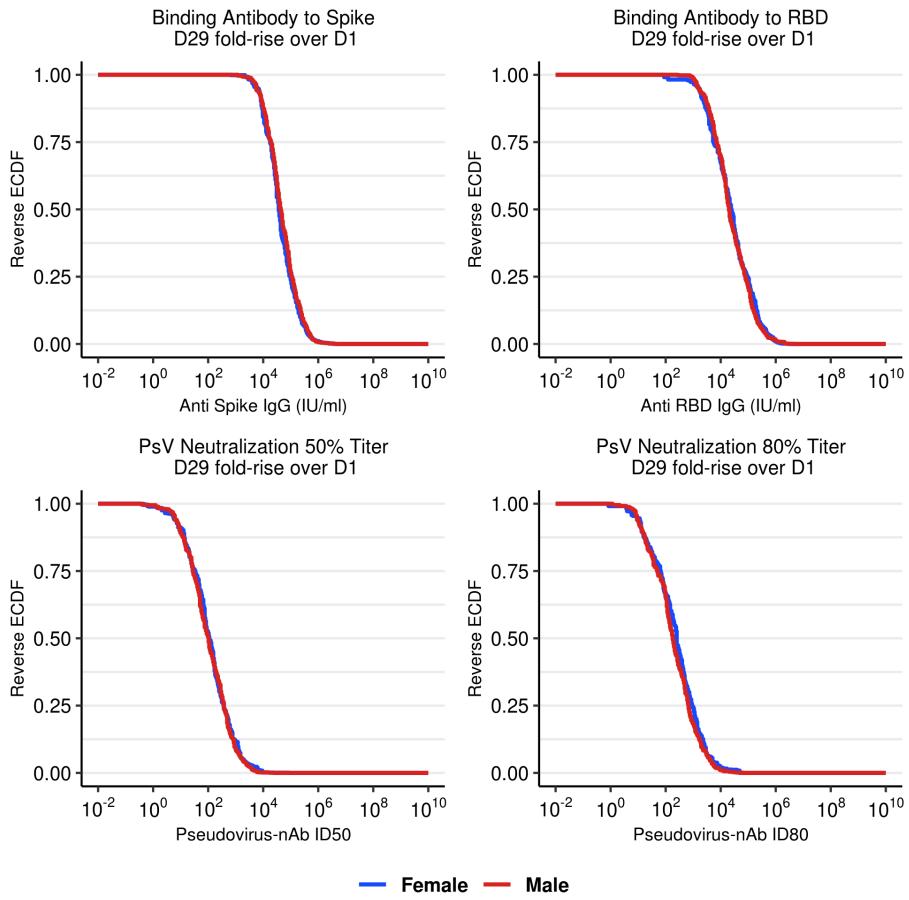


Figure 1.65: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT79

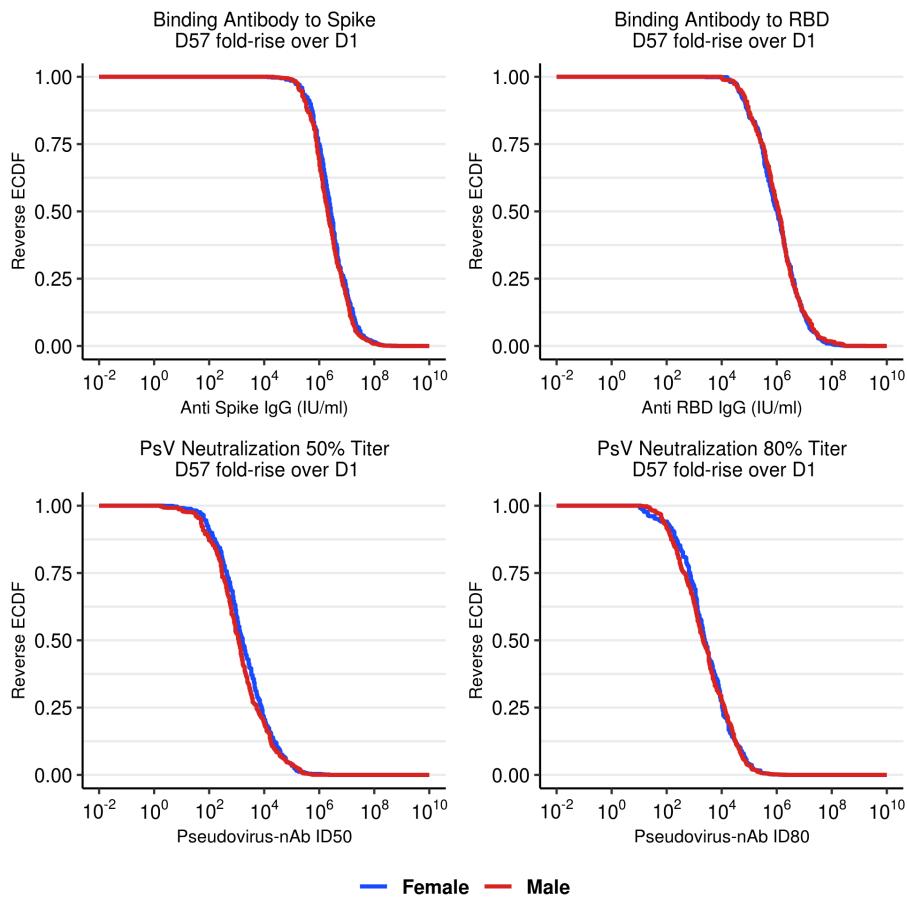


Figure 1.66: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

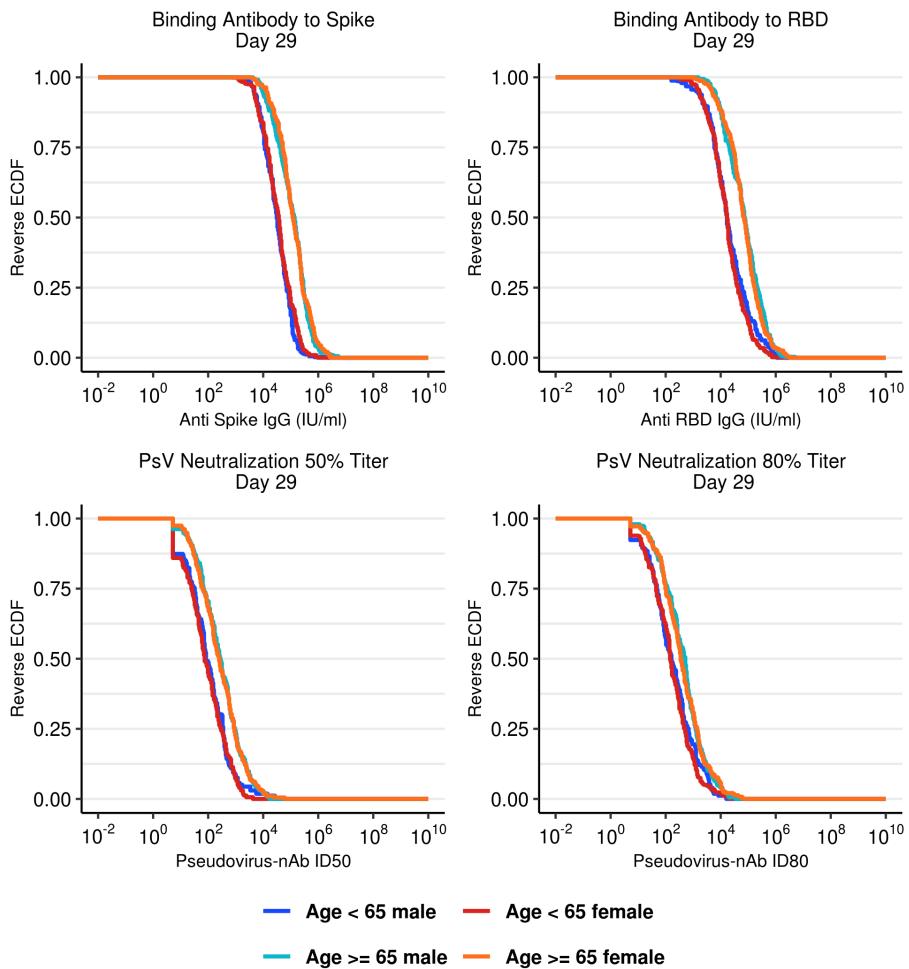


Figure 1.67: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT81

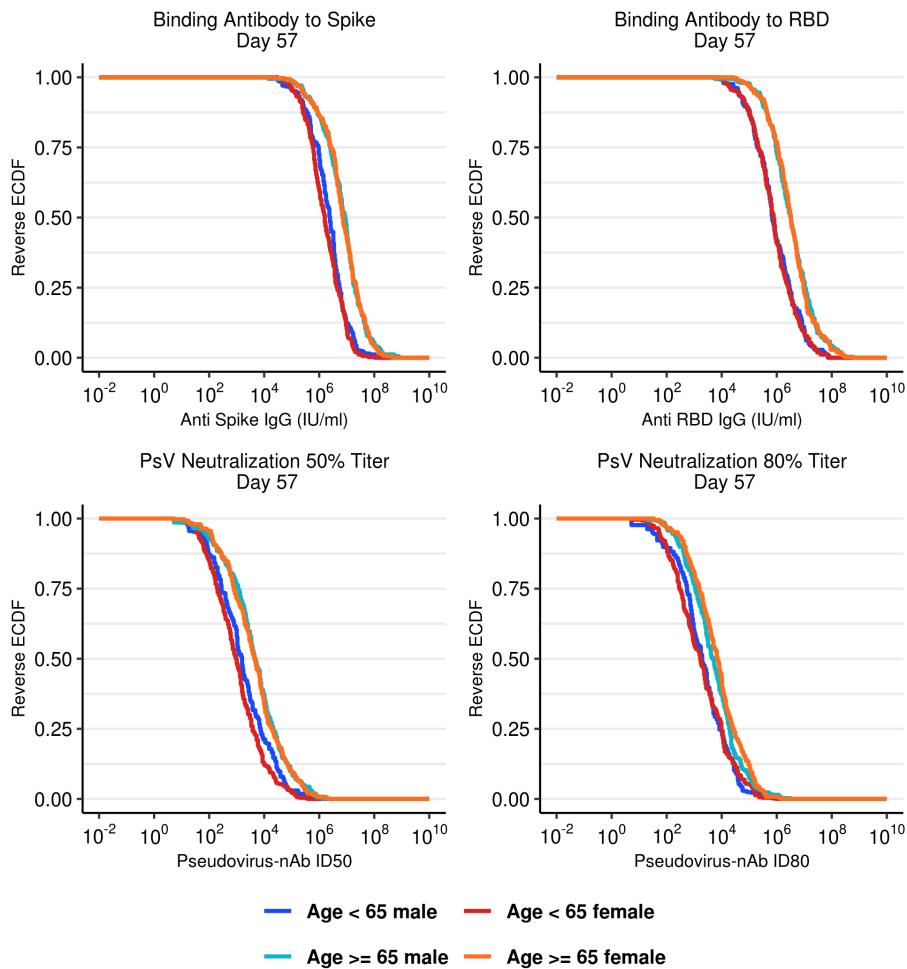


Figure 1.68: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

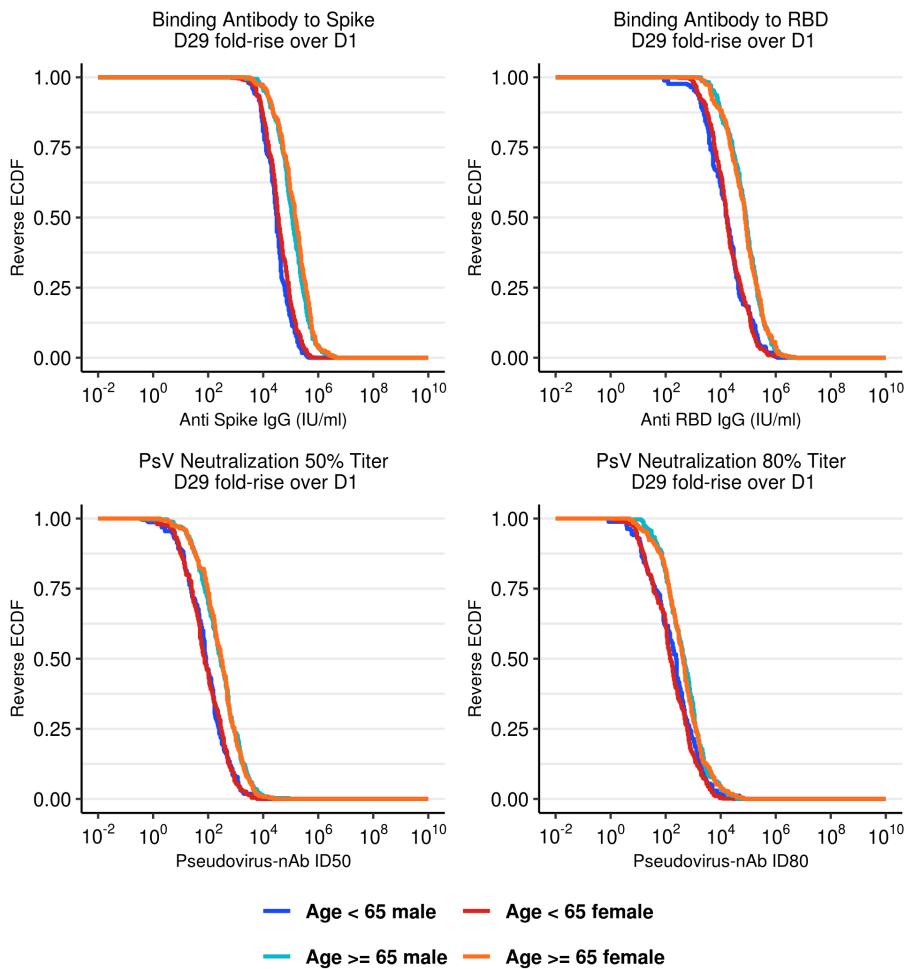


Figure 1.69: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT83

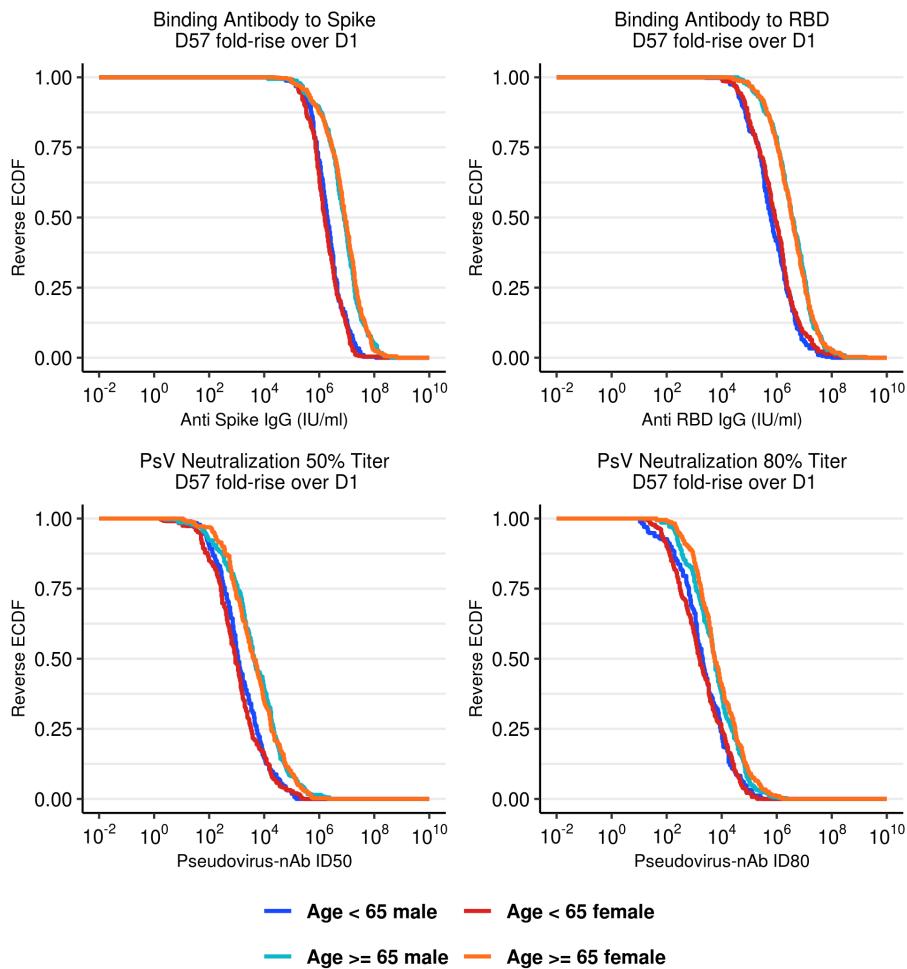


Figure 1.70: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex at birth.

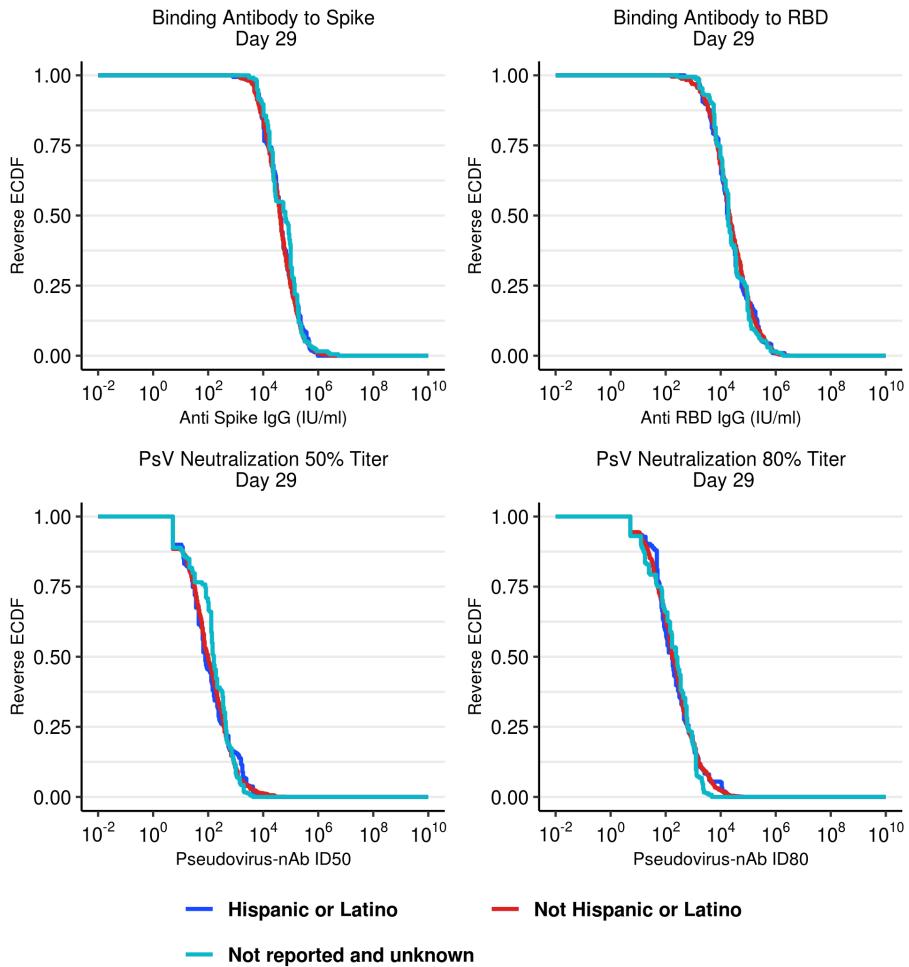


Figure 1.71: RCDF plots for D29 Ab markers: baseline negative vaccine arm by ethnicity.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT85

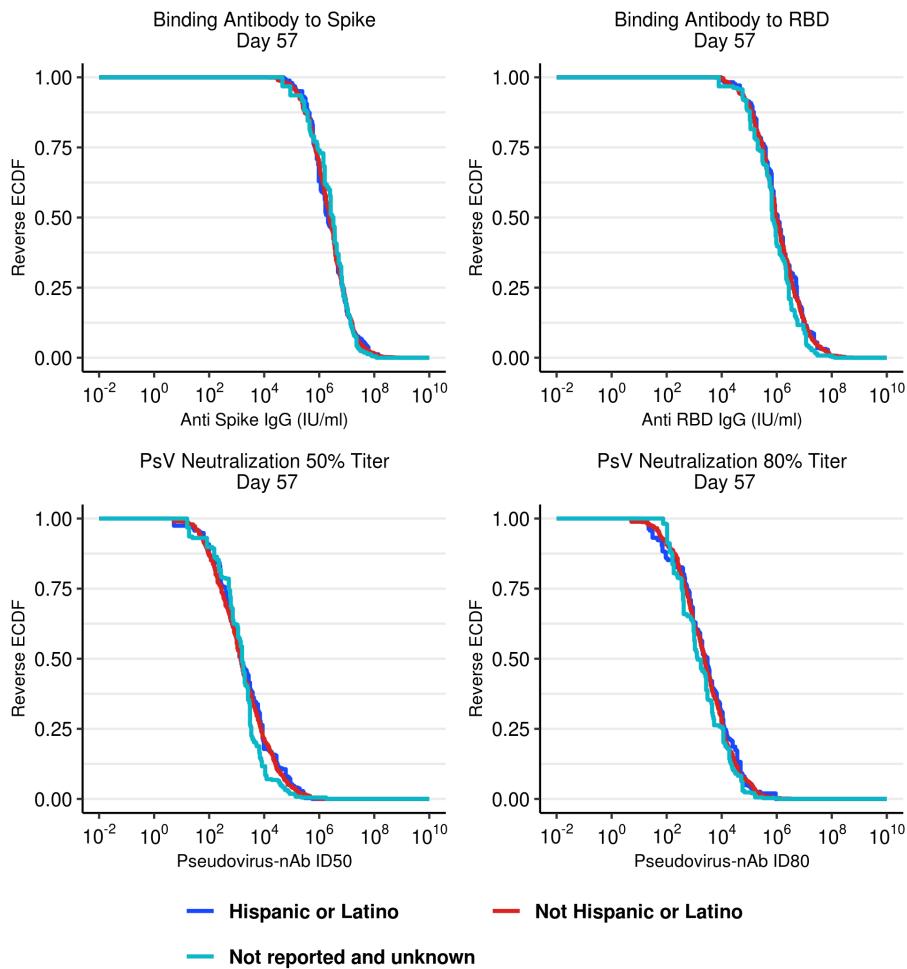


Figure 1.72: RCDF plots for D57 Ab markers: baseline negative vaccine arm by ethnicity.

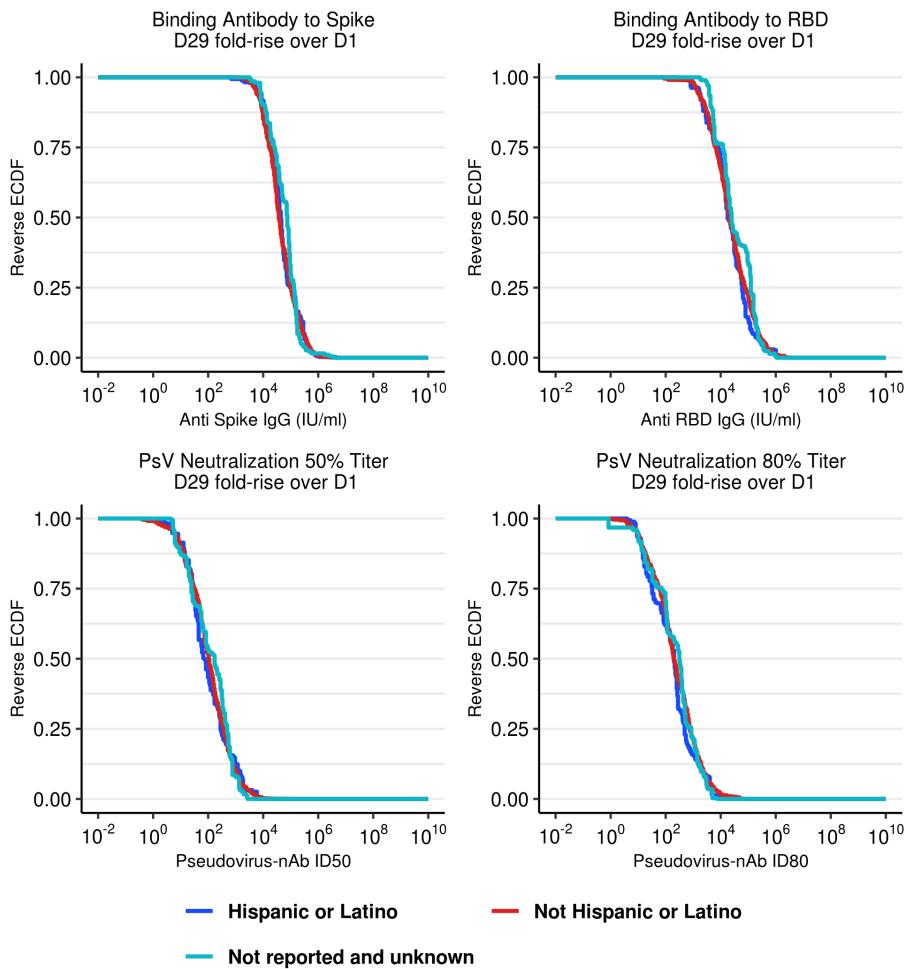


Figure 1.73: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT87

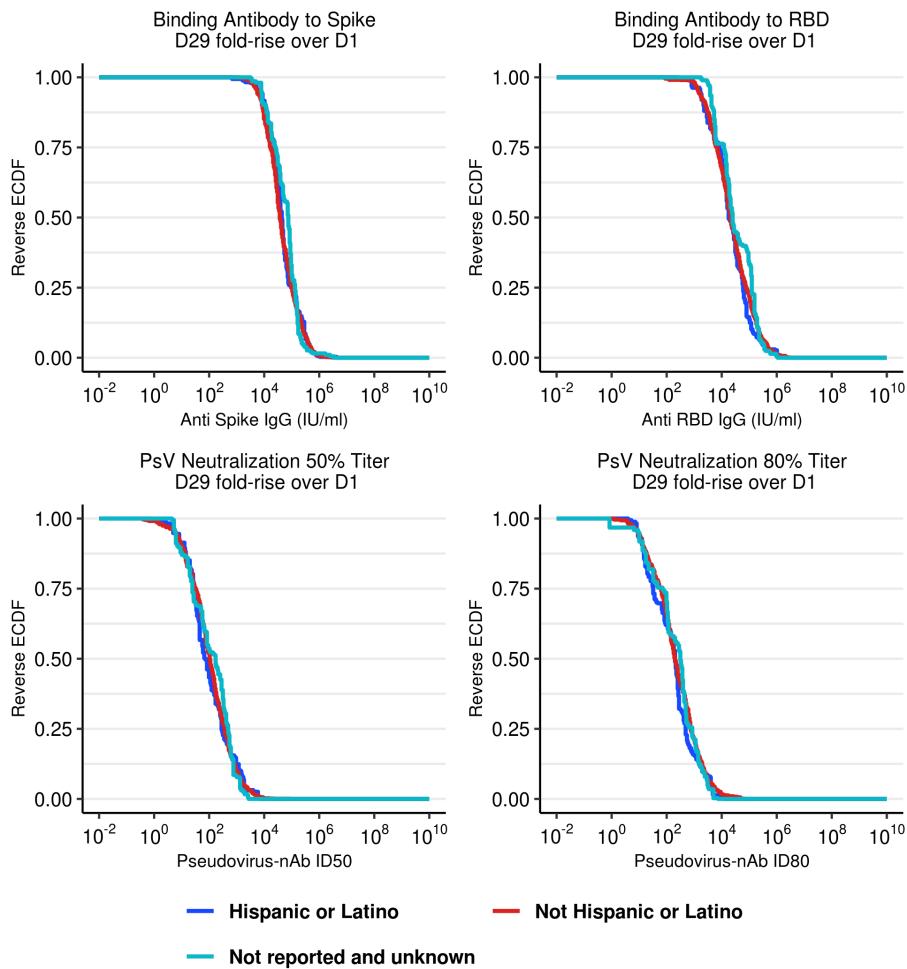


Figure 1.74: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

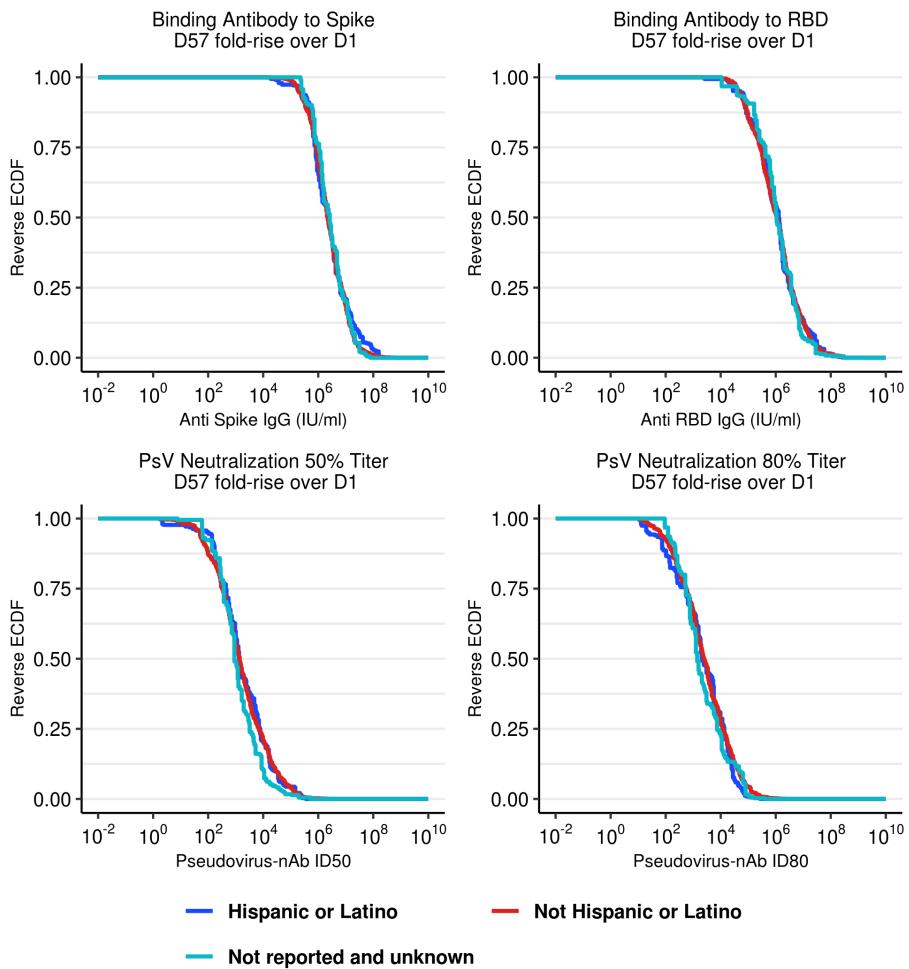


Figure 1.75: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT89

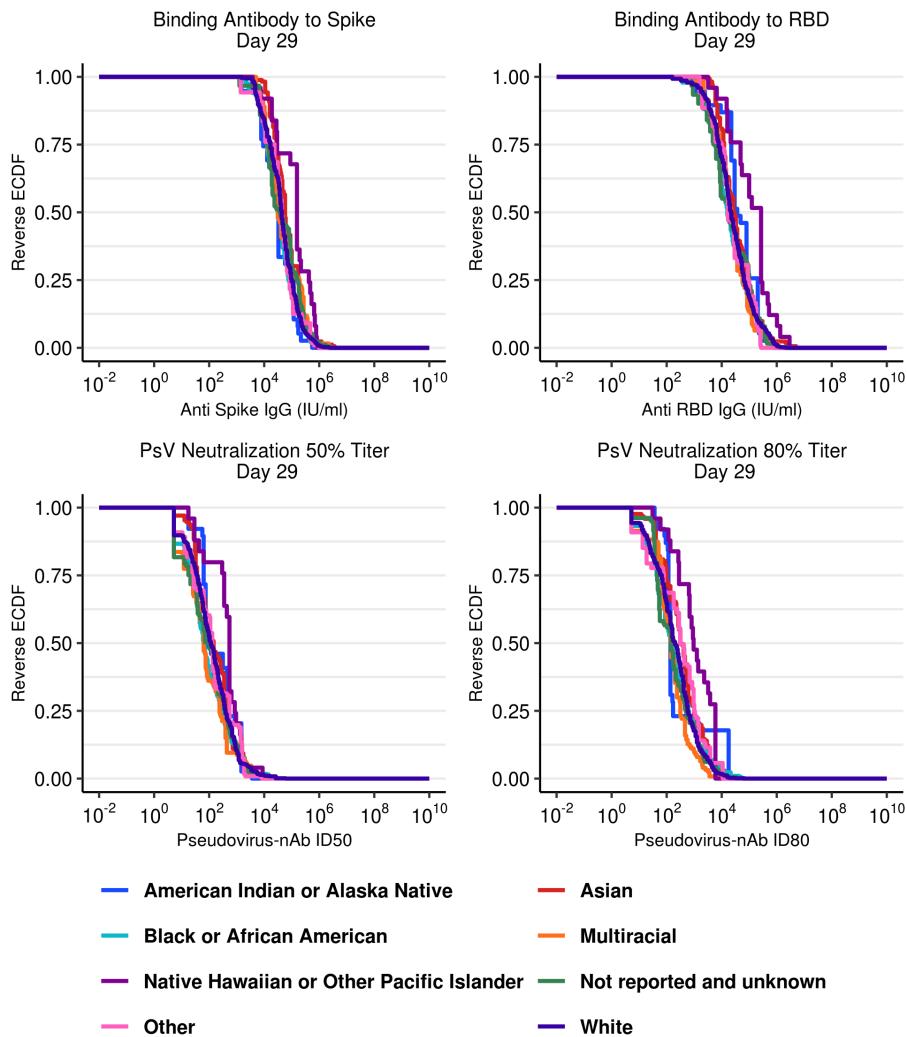


Figure 1.76: RCDF plots for D29 Ab markers: baseline negative vaccine arm by race.

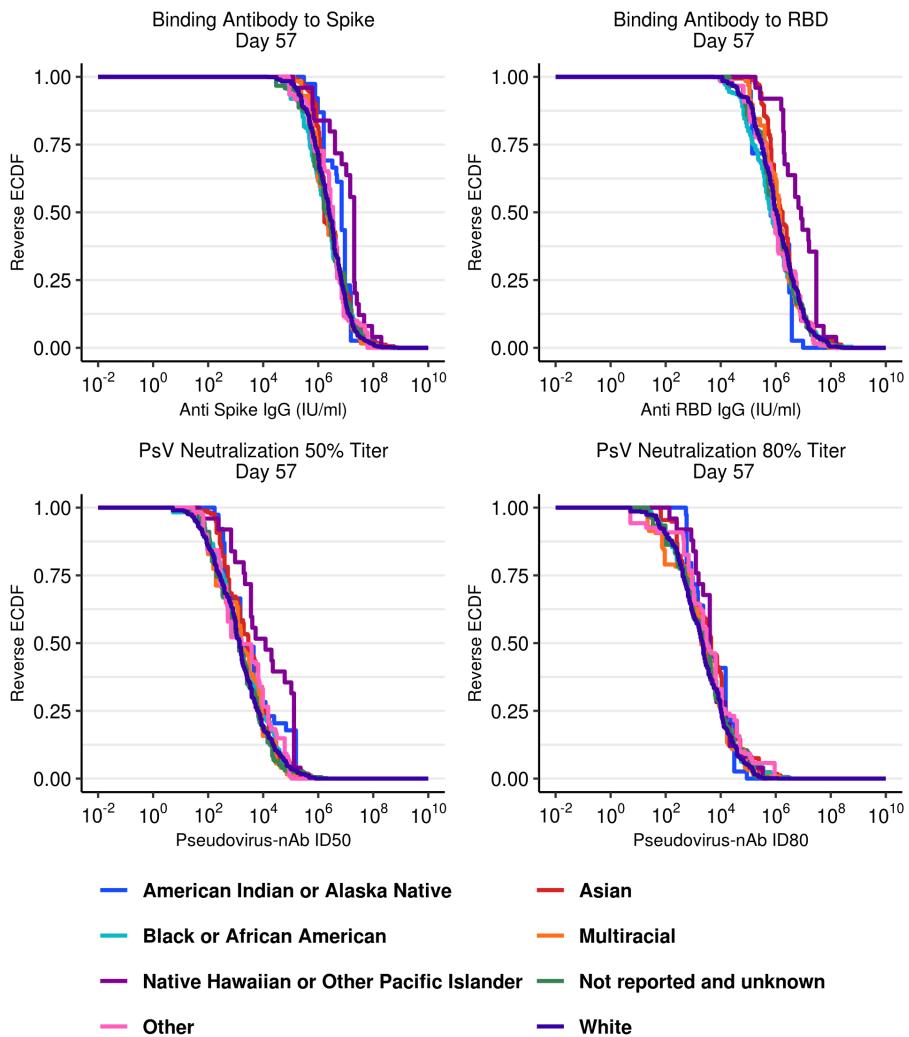


Figure 1.77: RCDF plots for D57 Ab markers: baseline negative vaccine arm by race.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT91

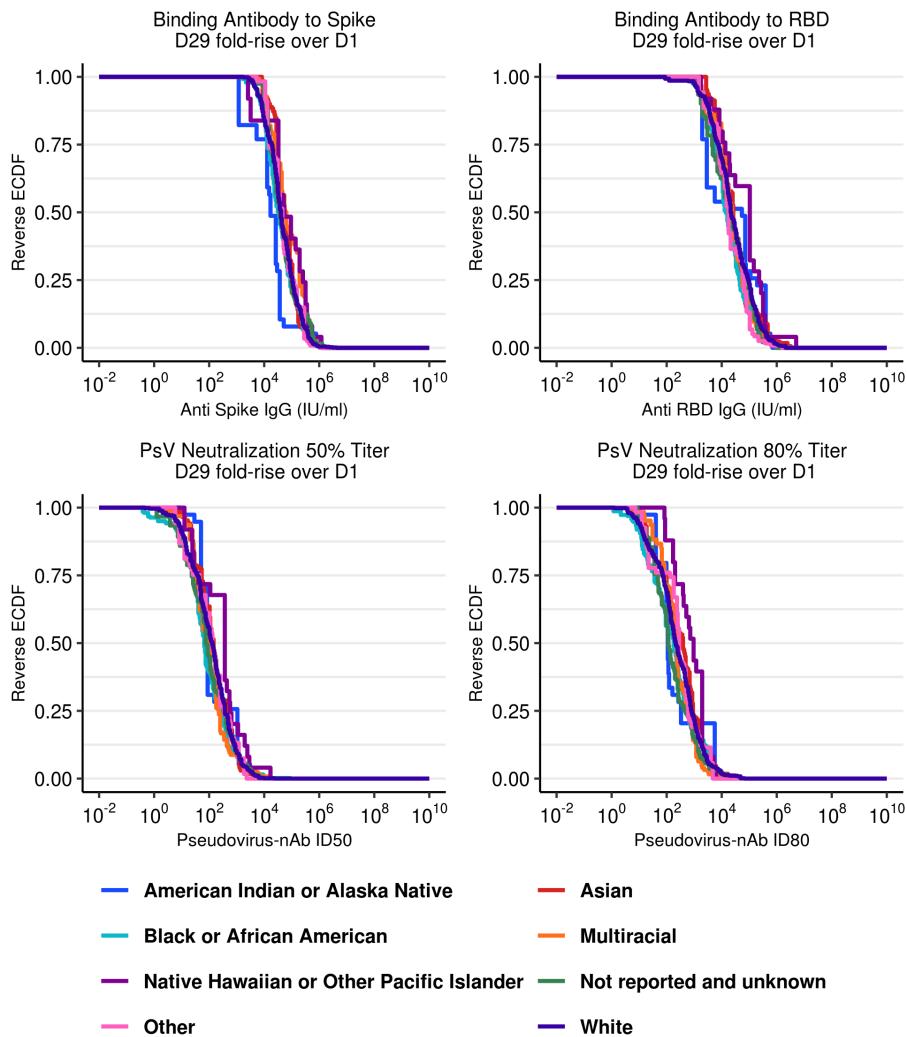


Figure 1.78: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

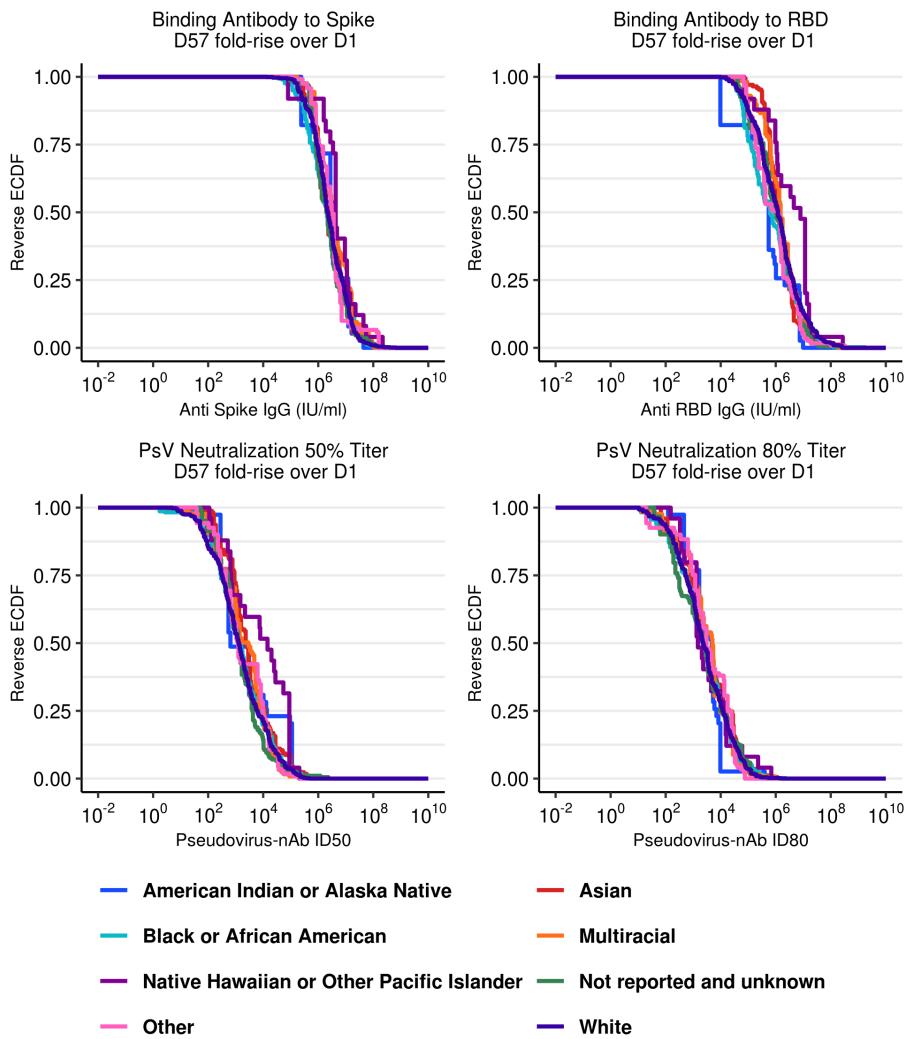


Figure 1.79: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT93

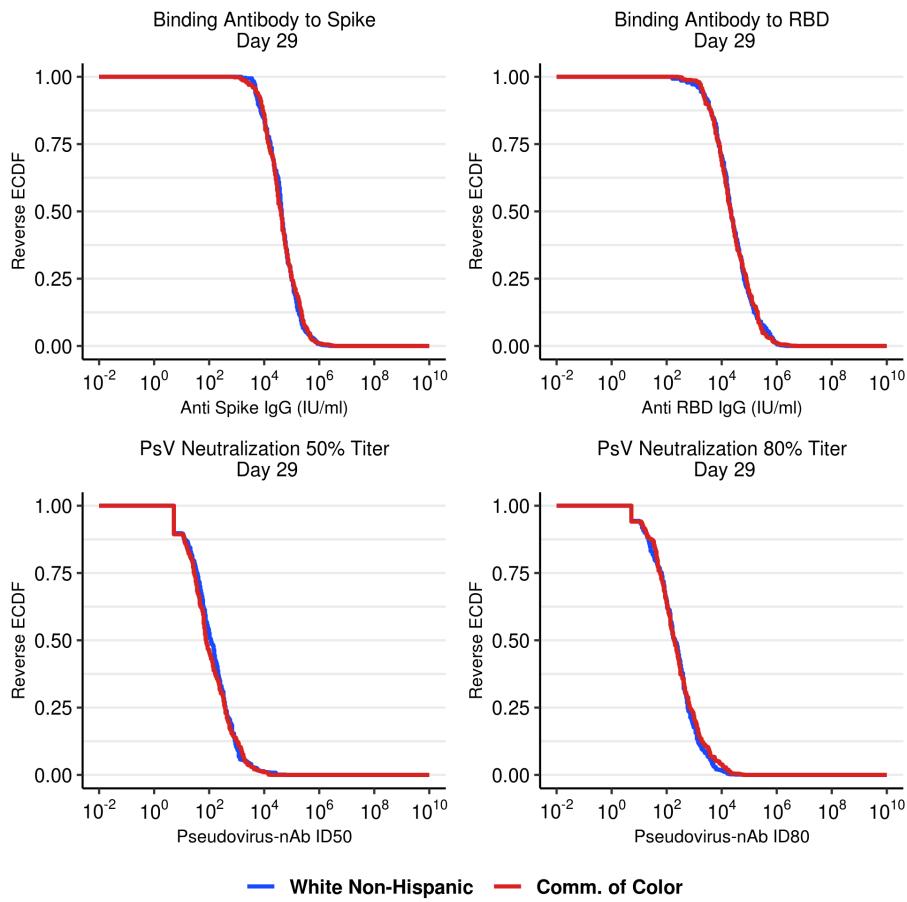


Figure 1.80: RCDF plots for D29 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

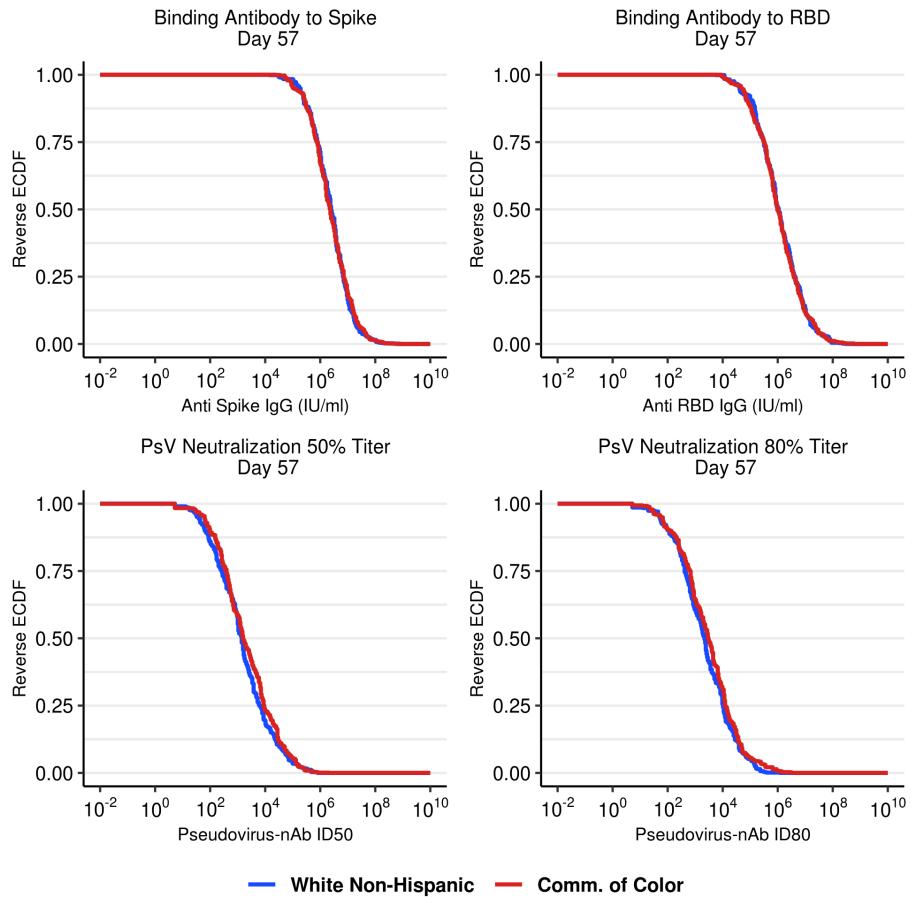


Figure 1.81: RCDF plots for D57 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT95

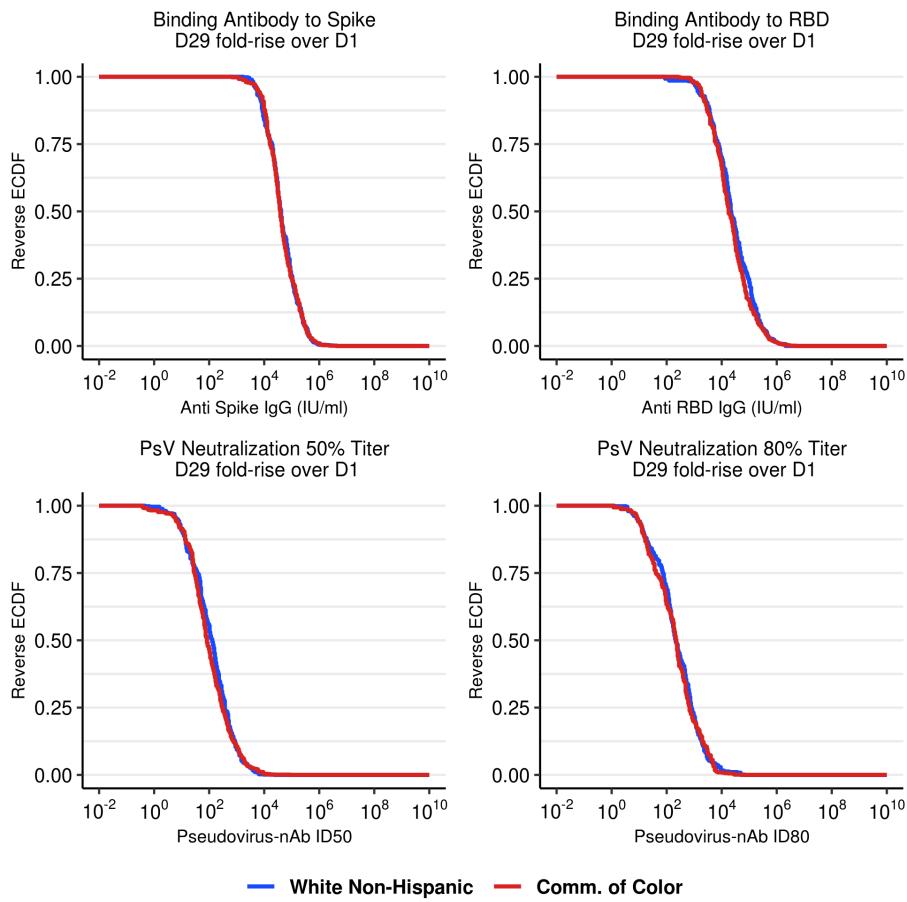


Figure 1.82: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

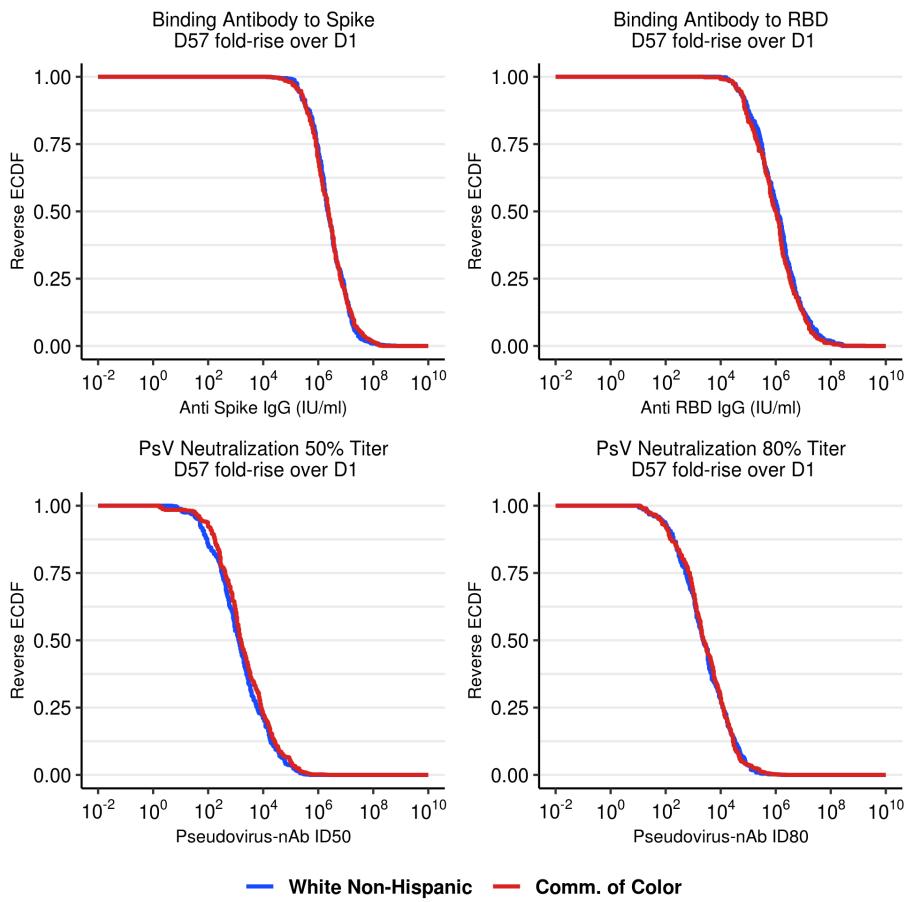


Figure 1.83: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT97

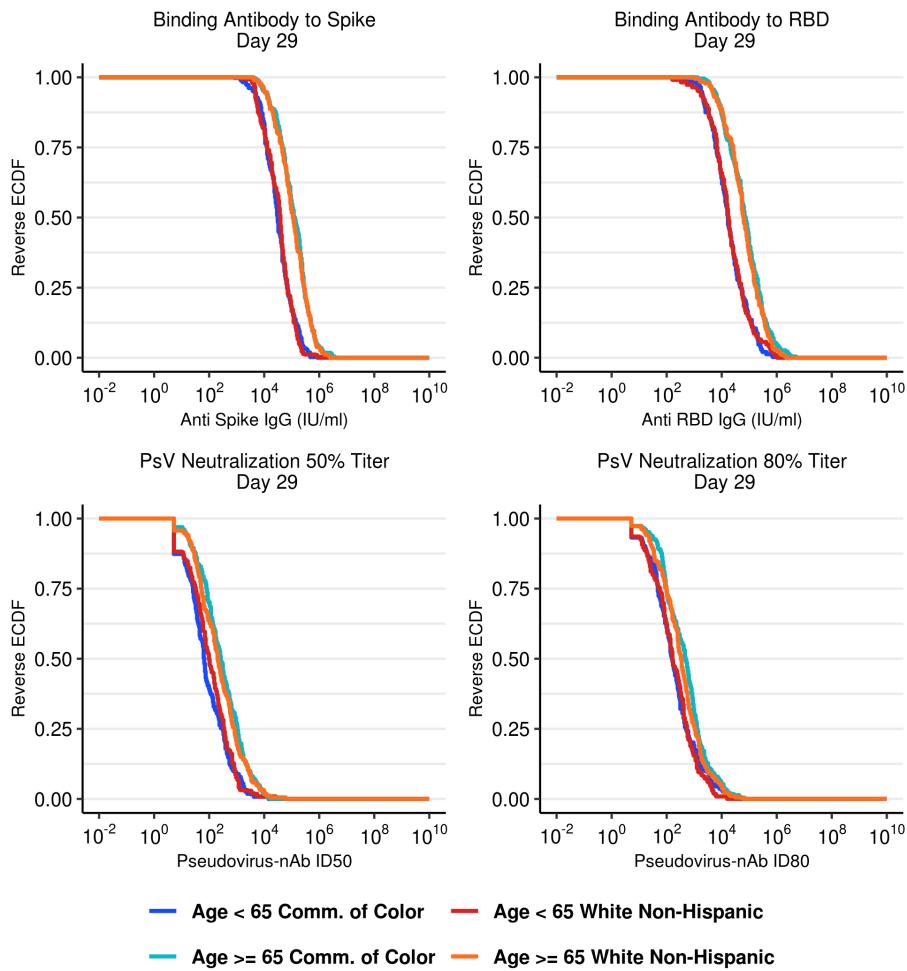


Figure 1.84: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

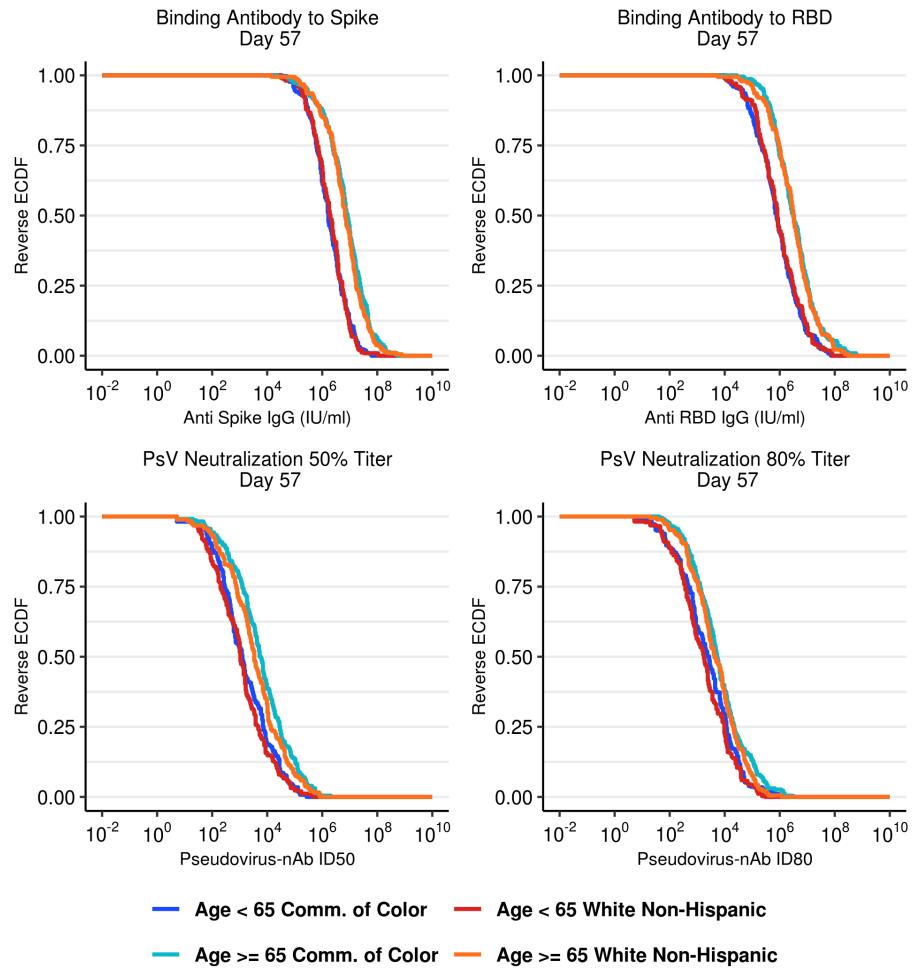


Figure 1.85: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT99

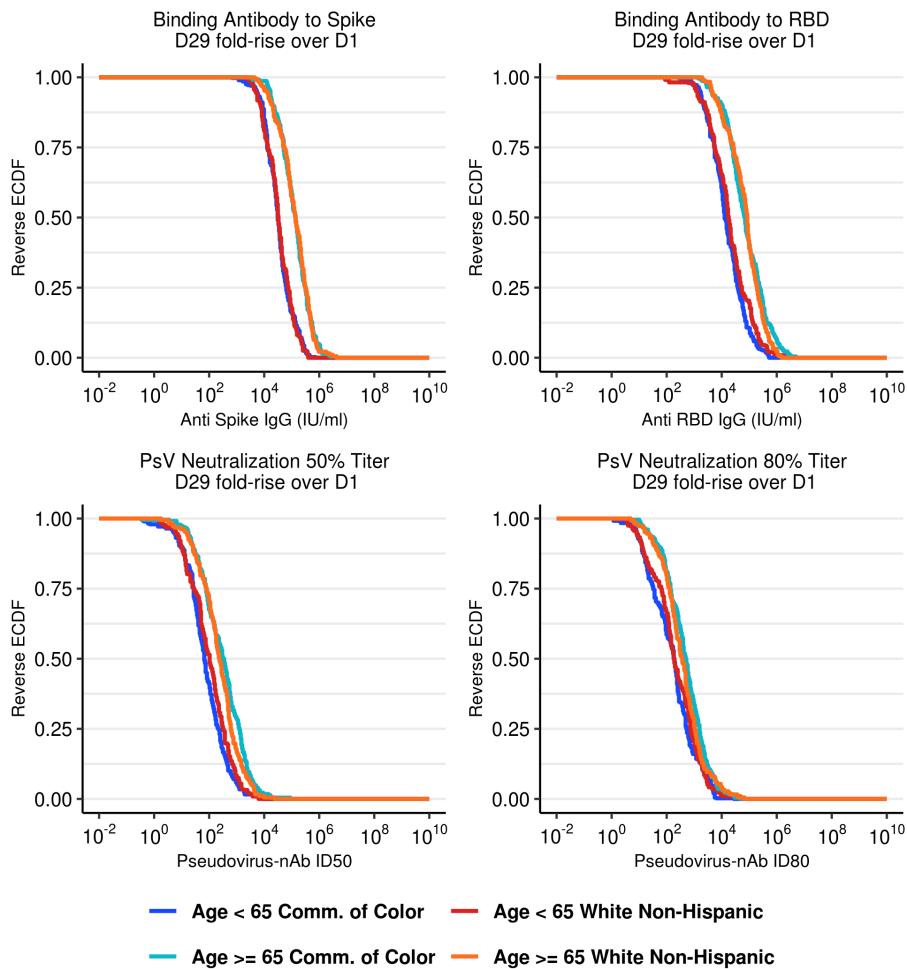


Figure 1.86: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

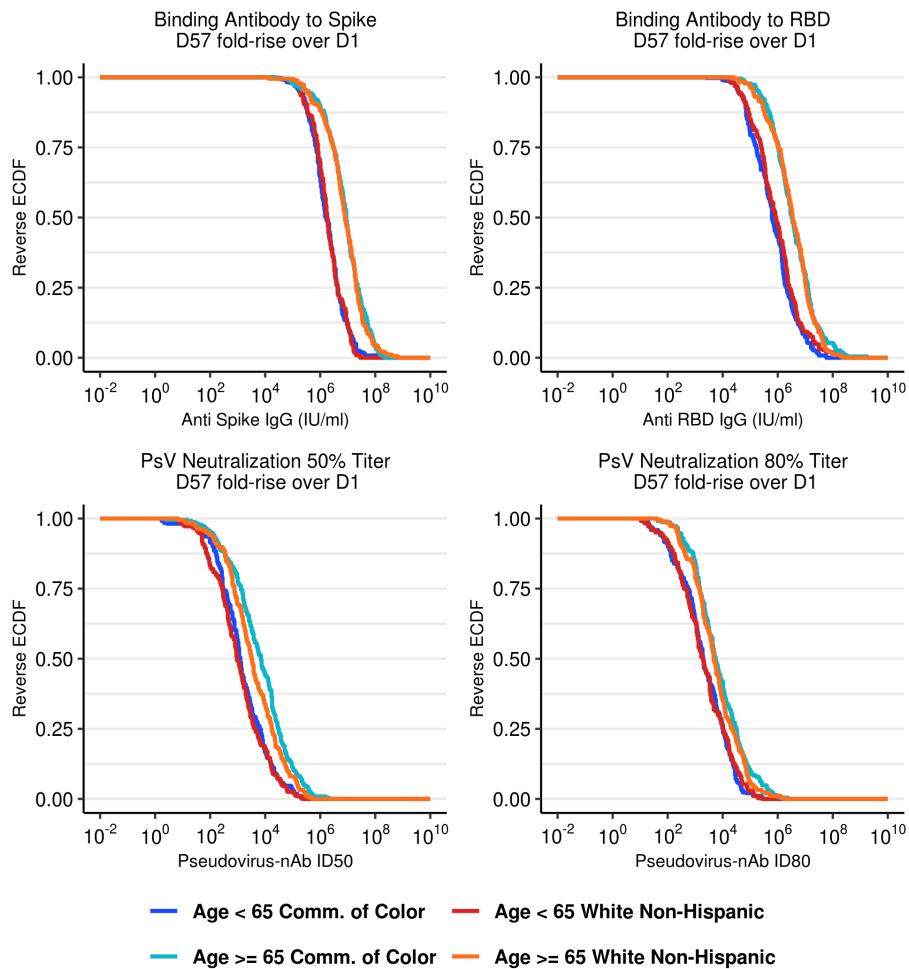


Figure 1.87: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT101

1.6.2 Baseline SARS-CoV-2 positive

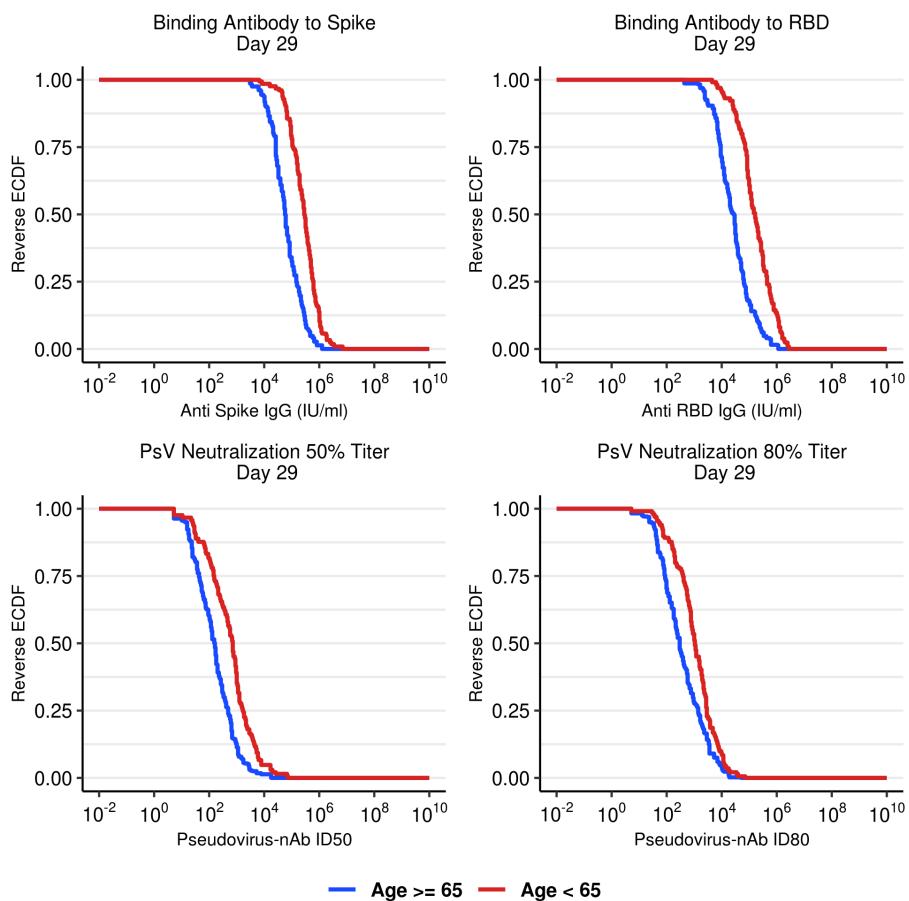


Figure 1.88: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age groups.

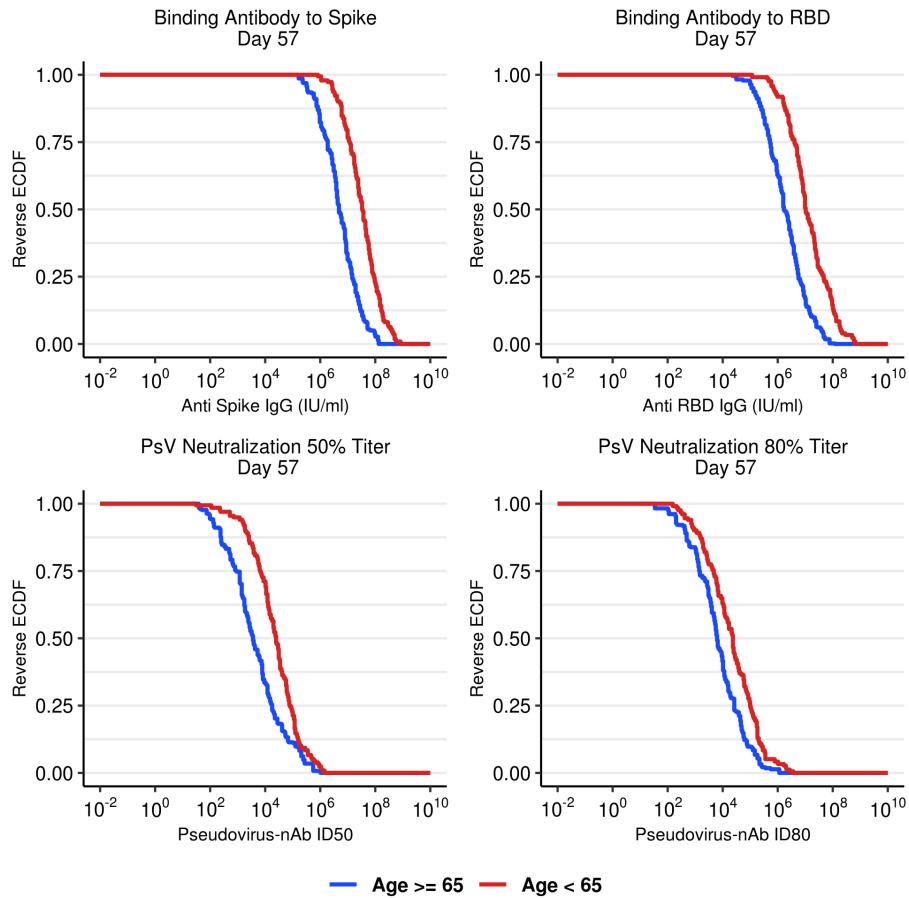


Figure 1.89: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age groups.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT103

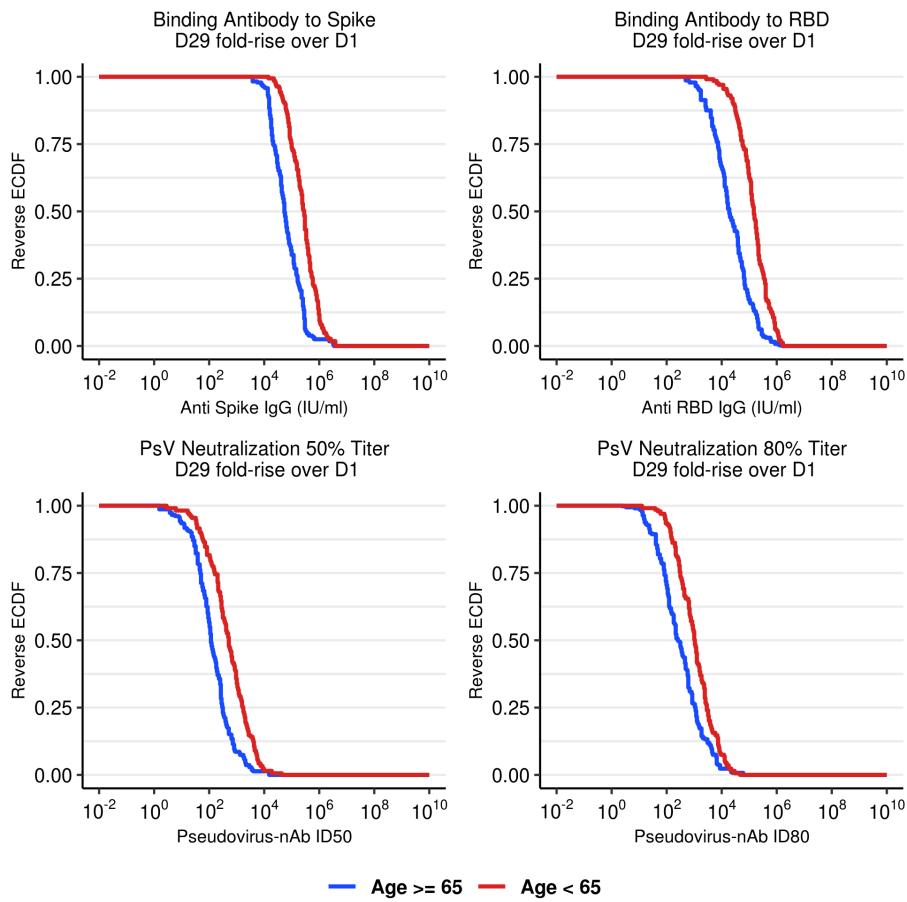


Figure 1.90: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

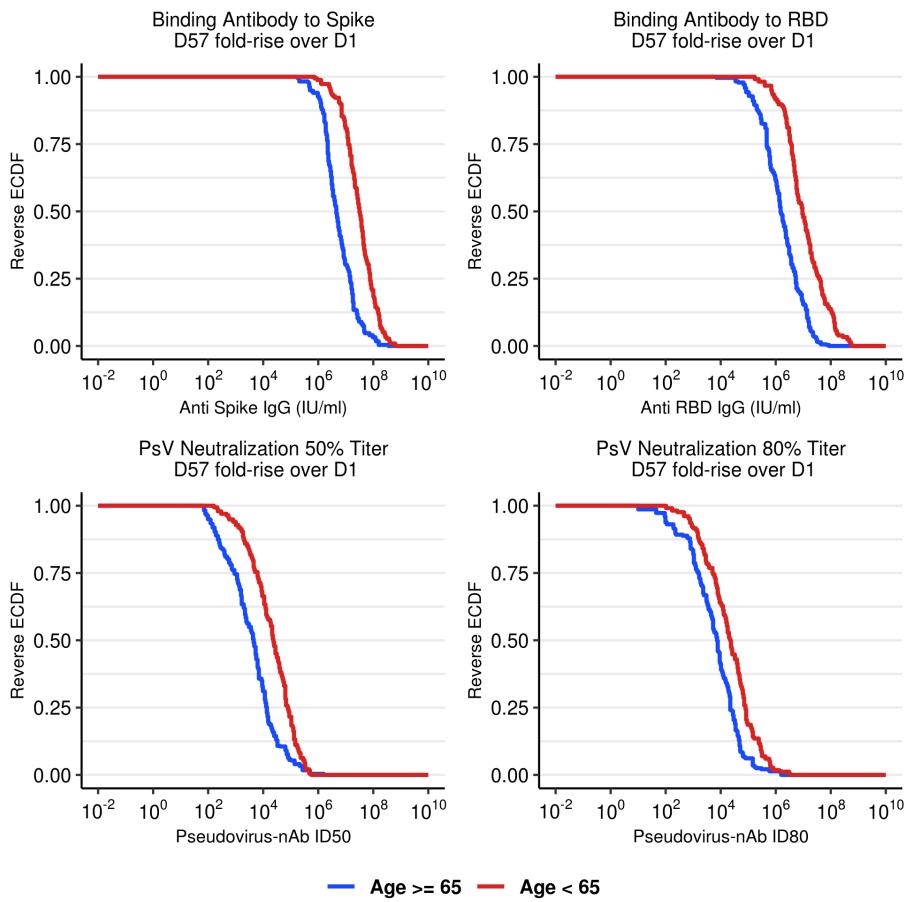


Figure 1.91: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT105

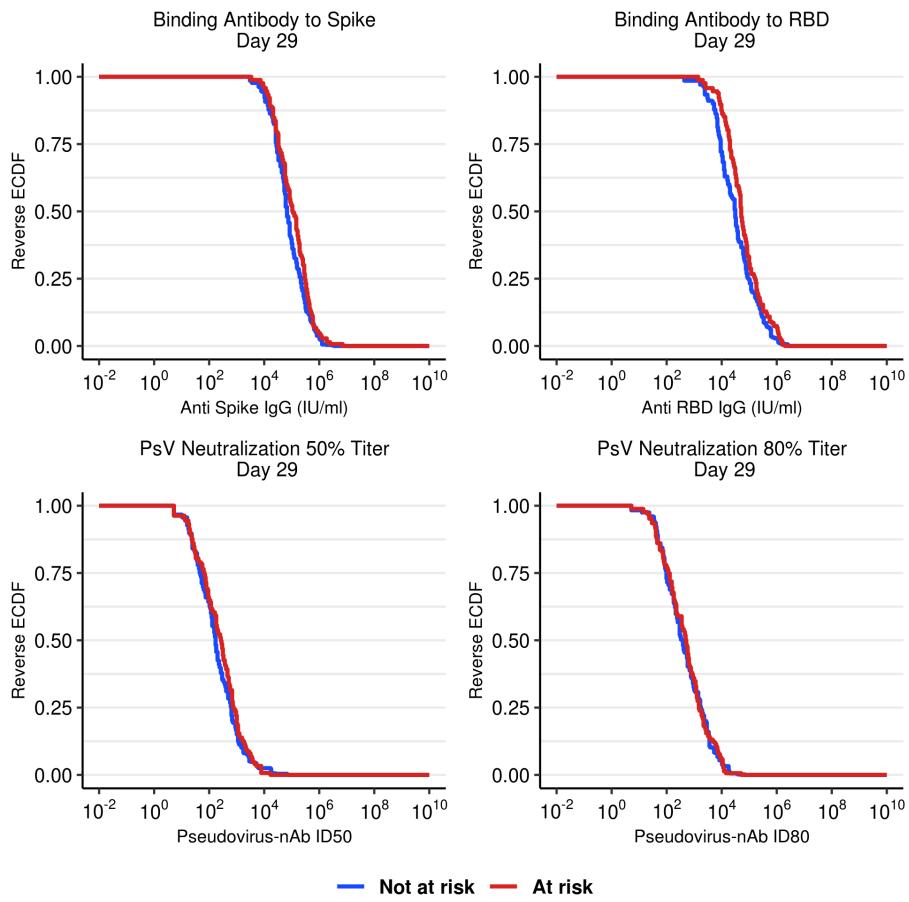


Figure 1.92: RCDF plots for D29 Ab markers: baseline positive vaccine arm by high-risk condition.

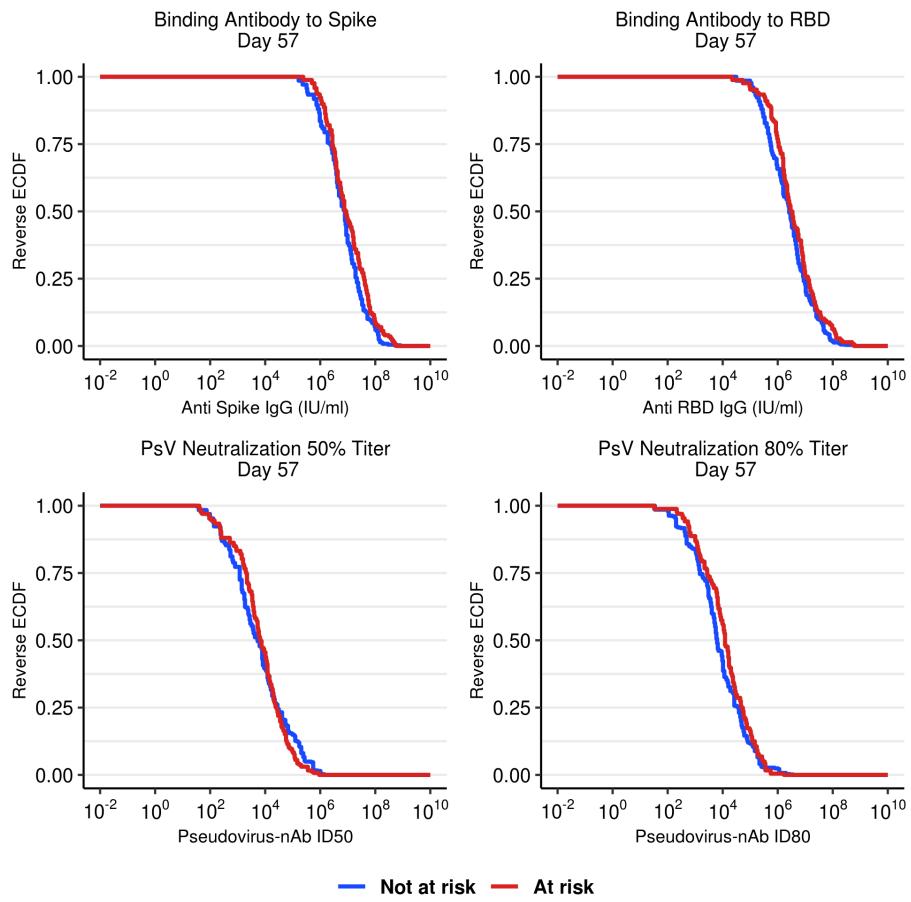


Figure 1.93: RCDF plots for D57 Ab markers: baseline positive vaccine arm by high-risk condition.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT107

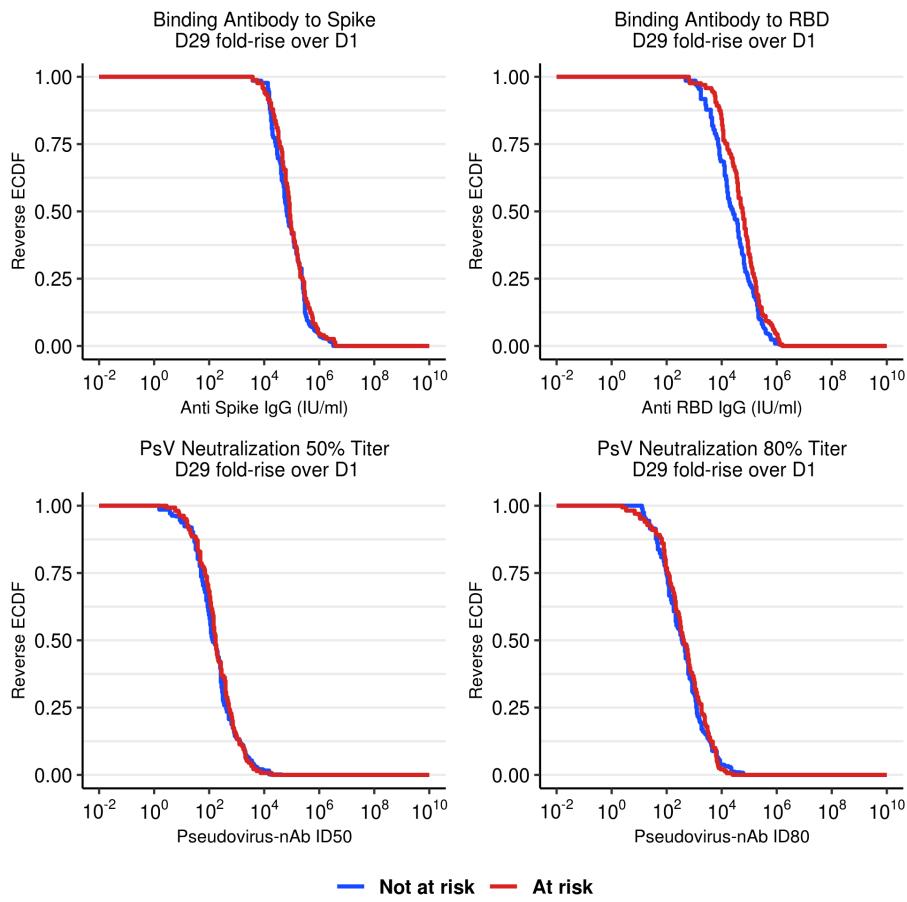


Figure 1.94: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

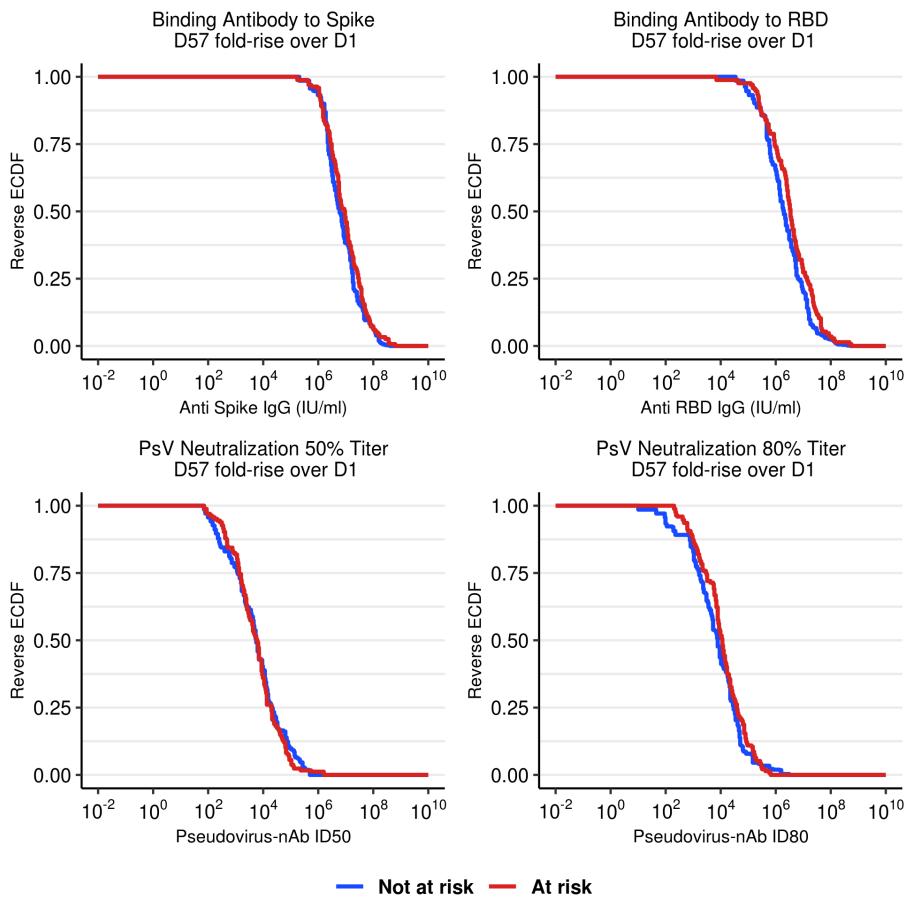


Figure 1.95: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT109

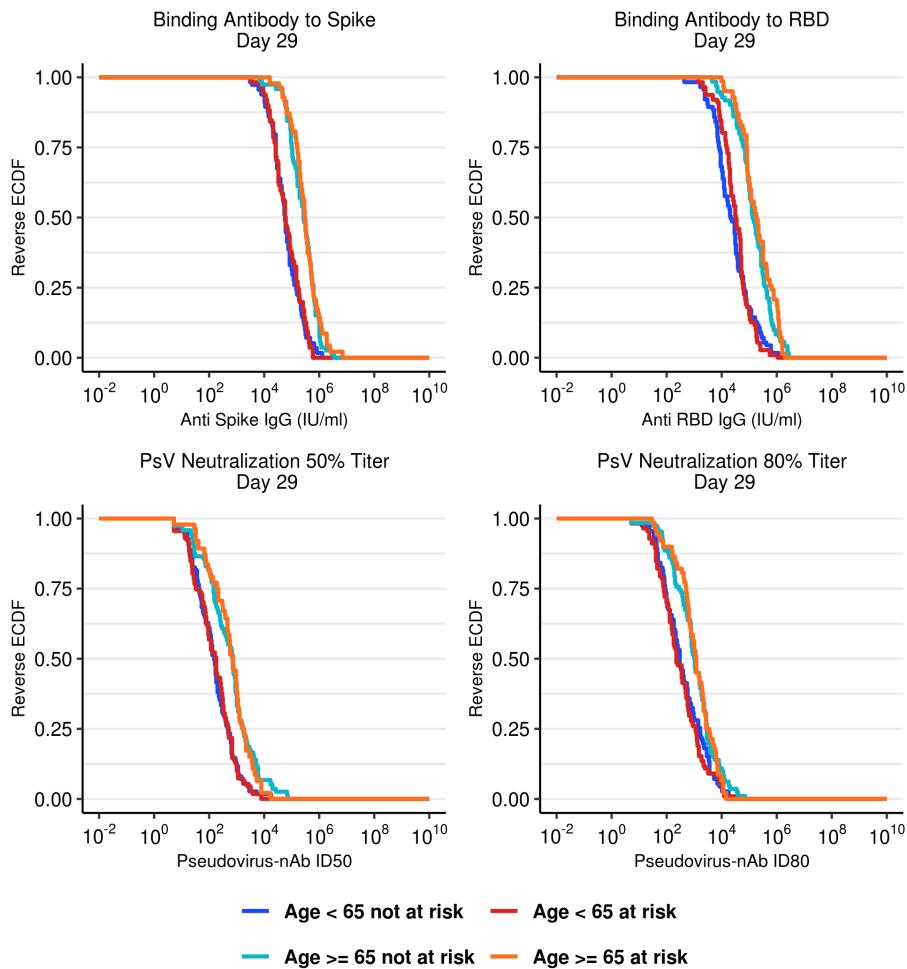


Figure 1.96: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and high-risk condition.

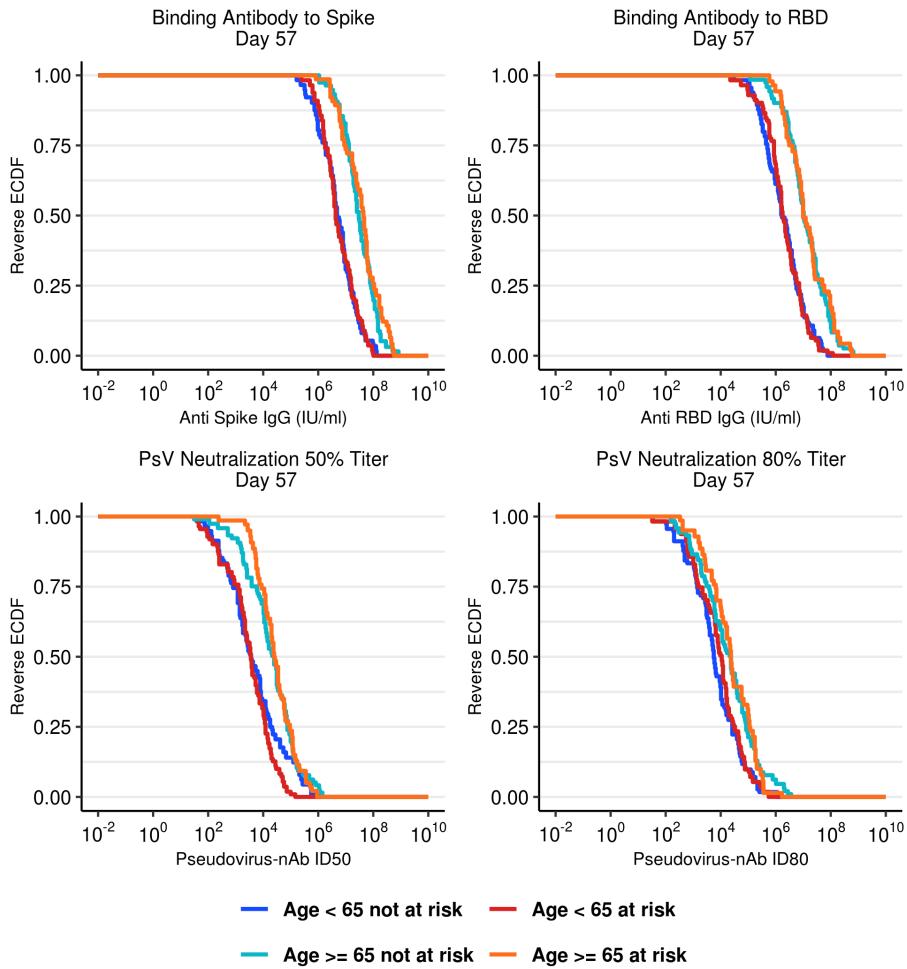


Figure 1.97: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and high-risk condition.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT111

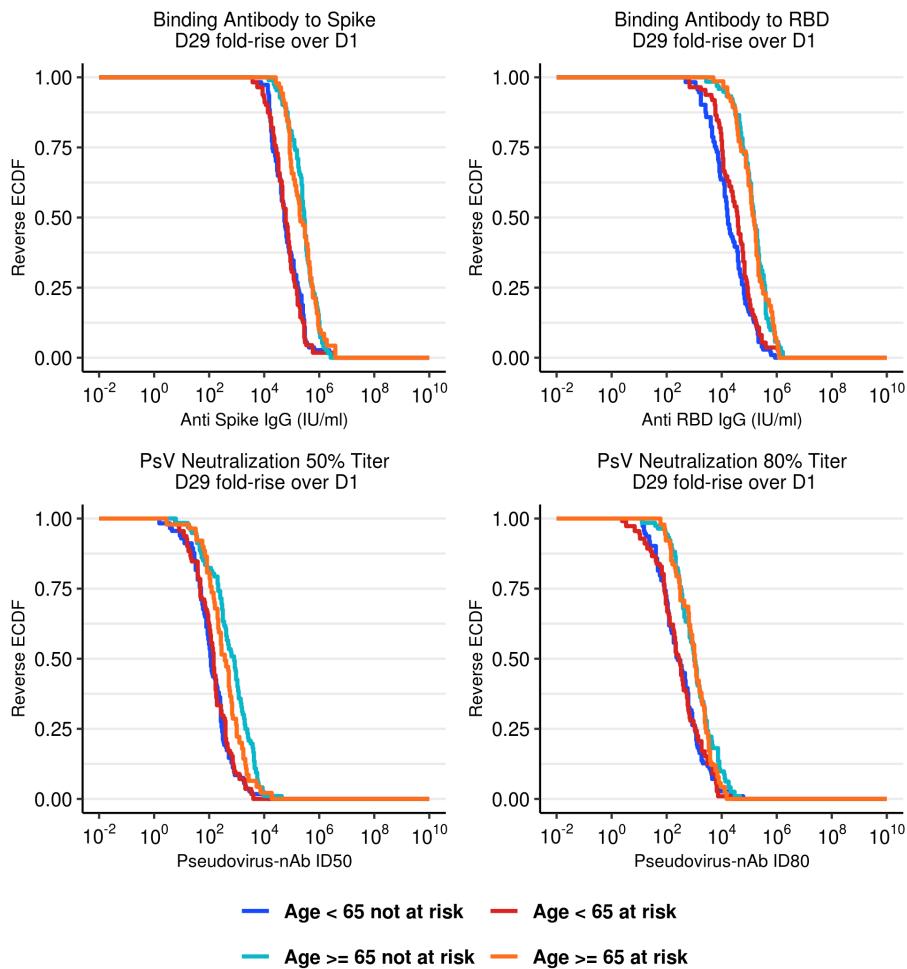


Figure 1.98: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

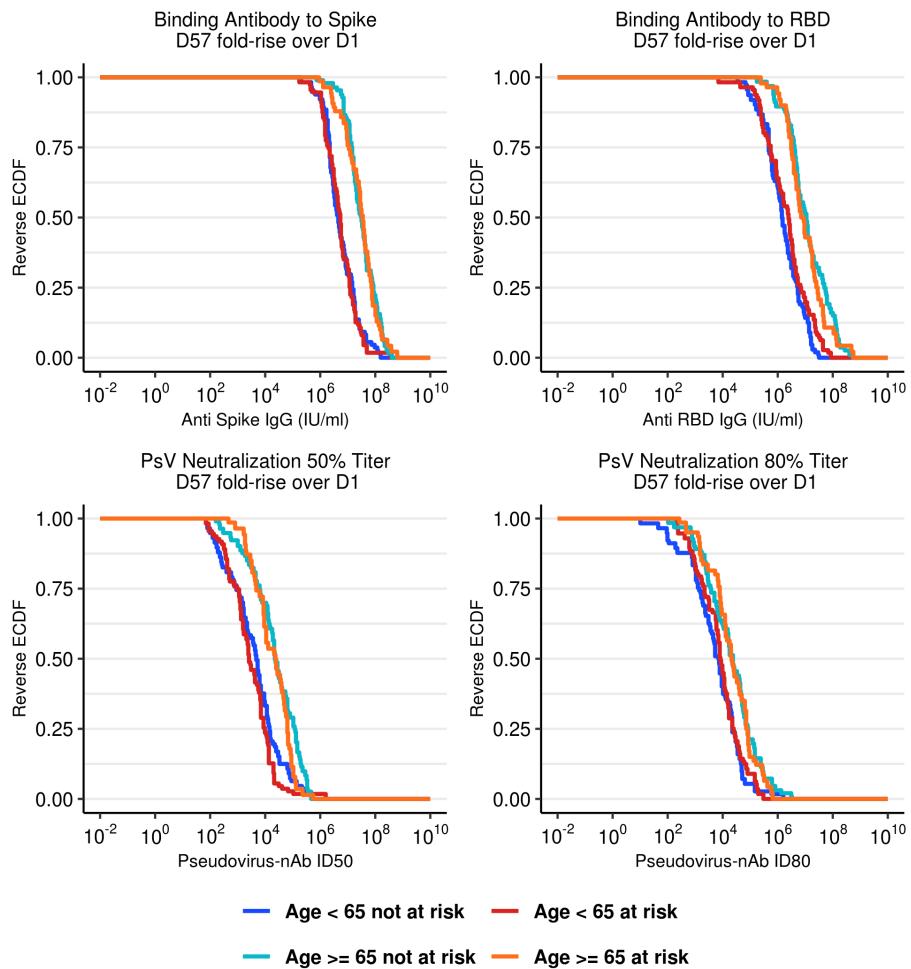


Figure 1.99: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT113

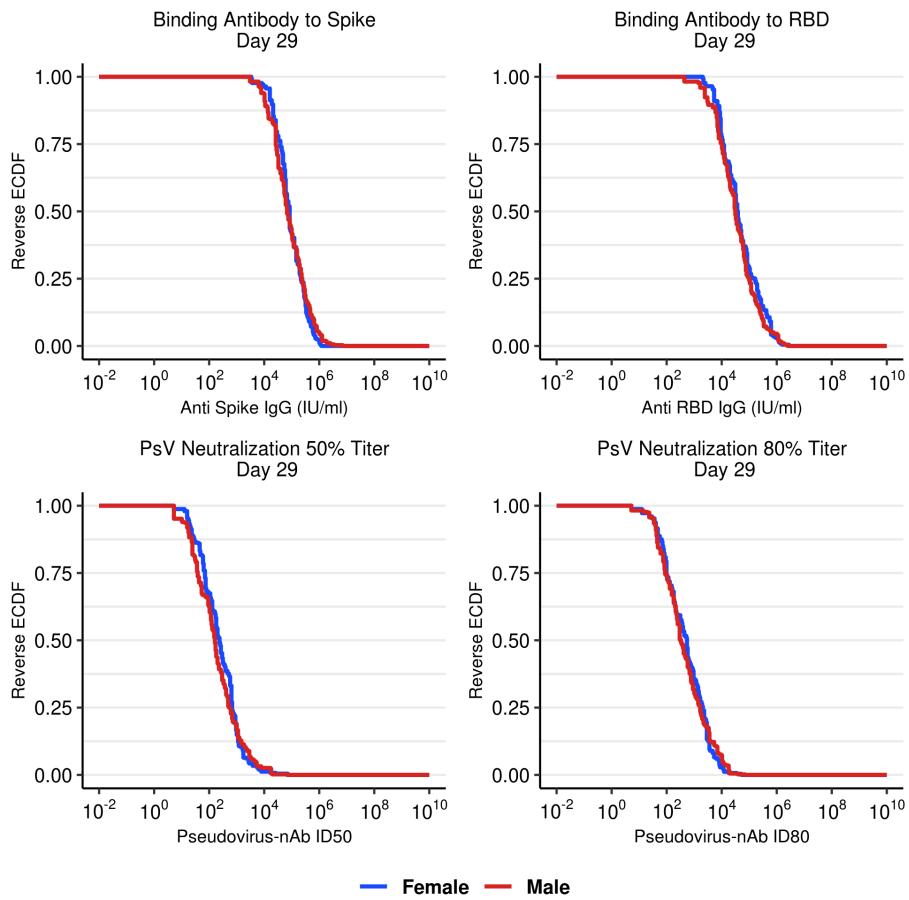


Figure 1.100: RCDF plots for D29 Ab markers: baseline positive vaccine arm by sex assigned at birth.

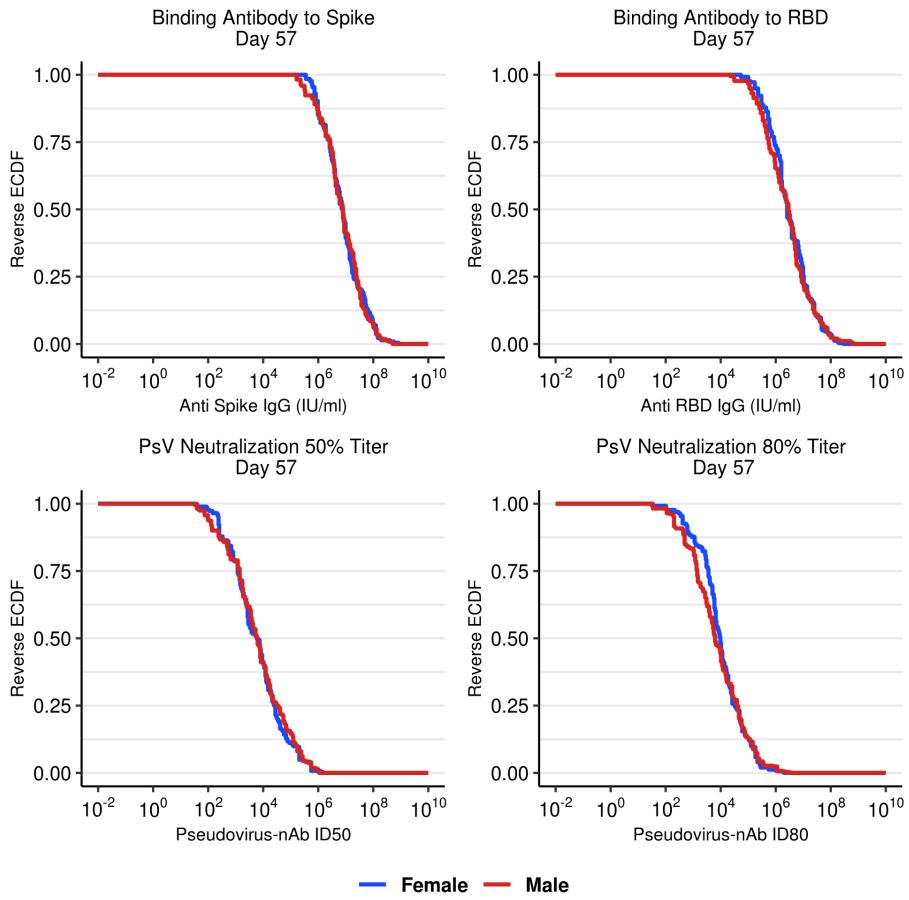


Figure 1.101: RCDF plots for D57 Ab markers: baseline positive vaccine arm by sex assigned at birth.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT115

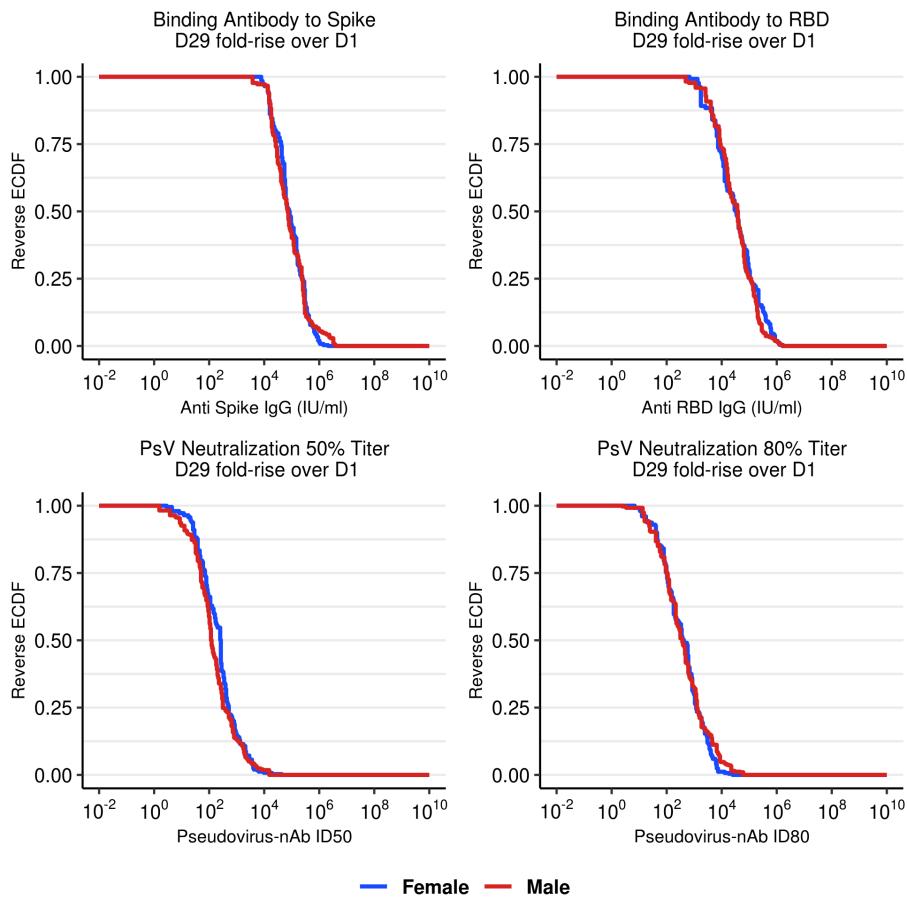


Figure 1.102: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

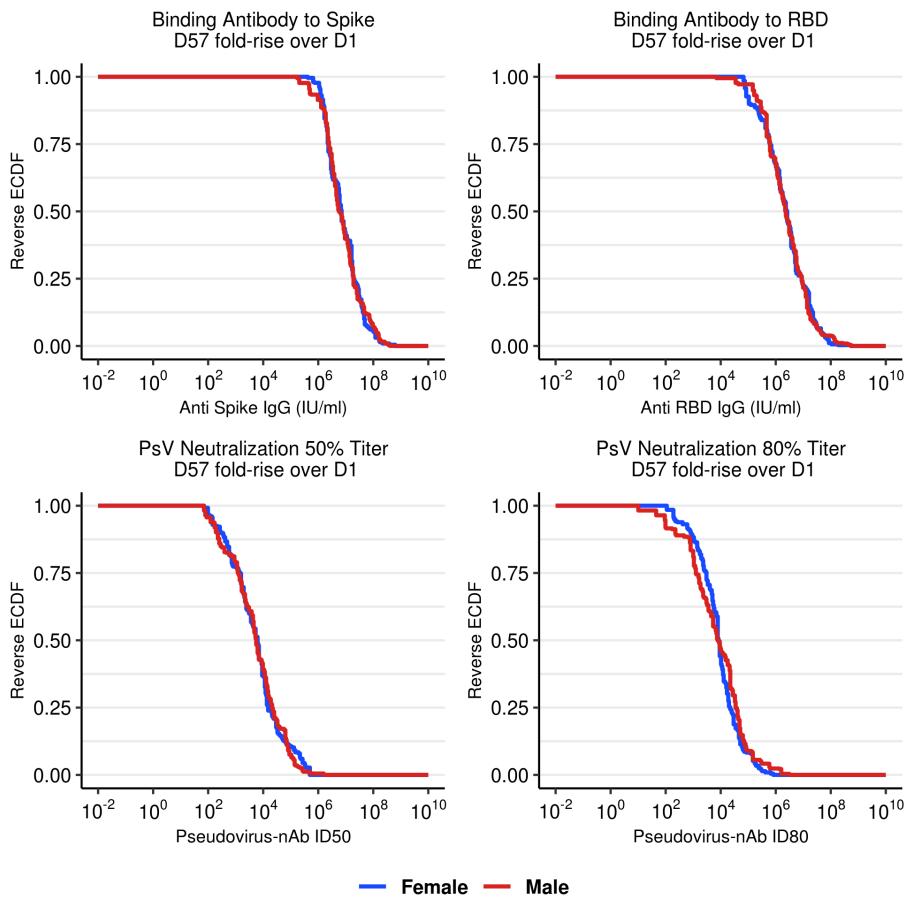


Figure 1.103: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT117

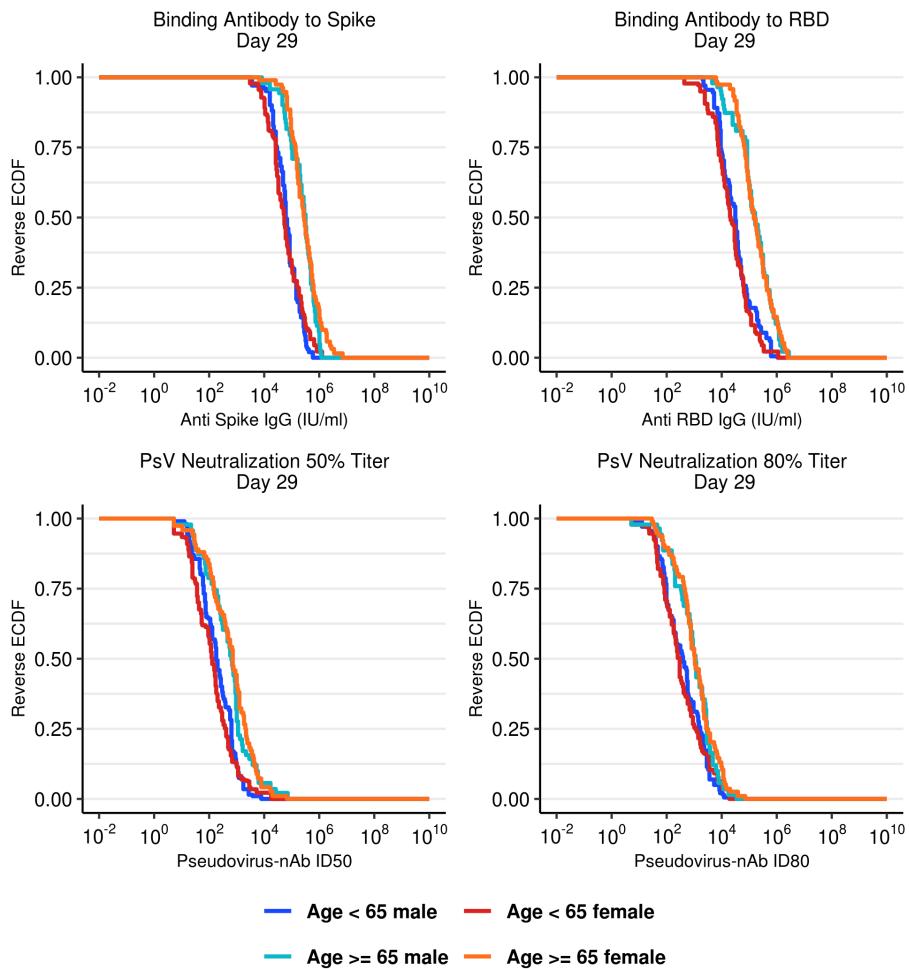


Figure 1.104: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

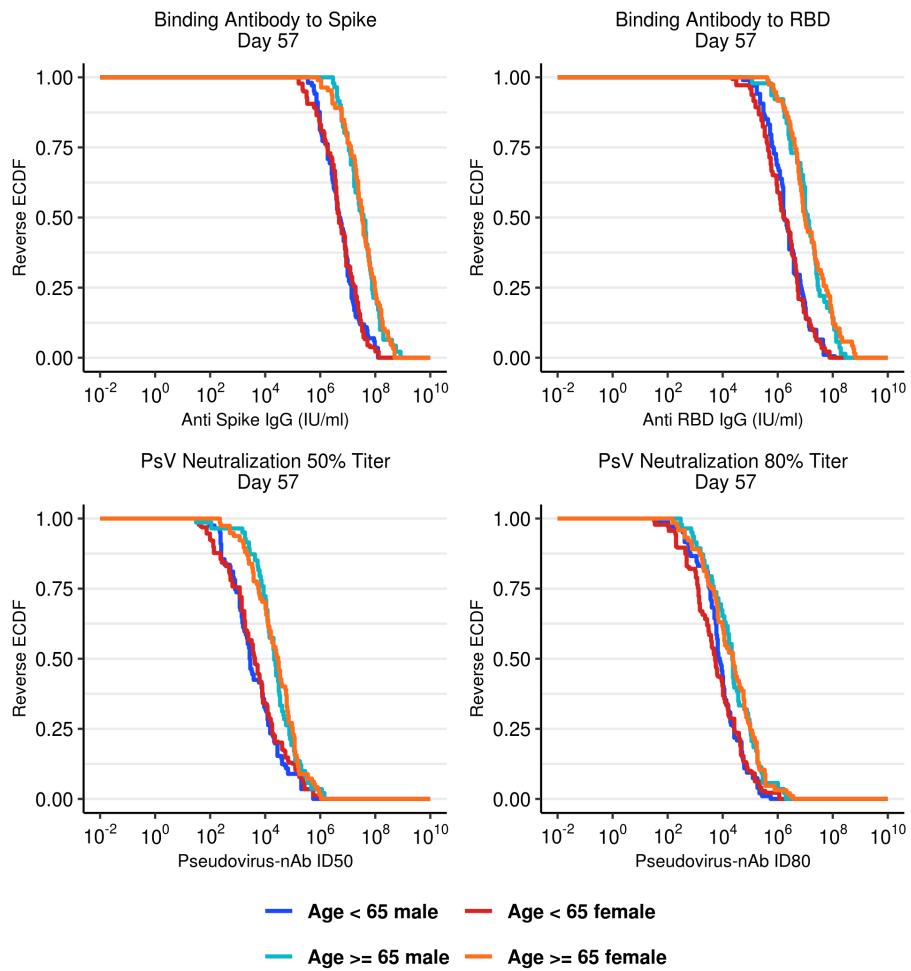


Figure 1.105: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT119

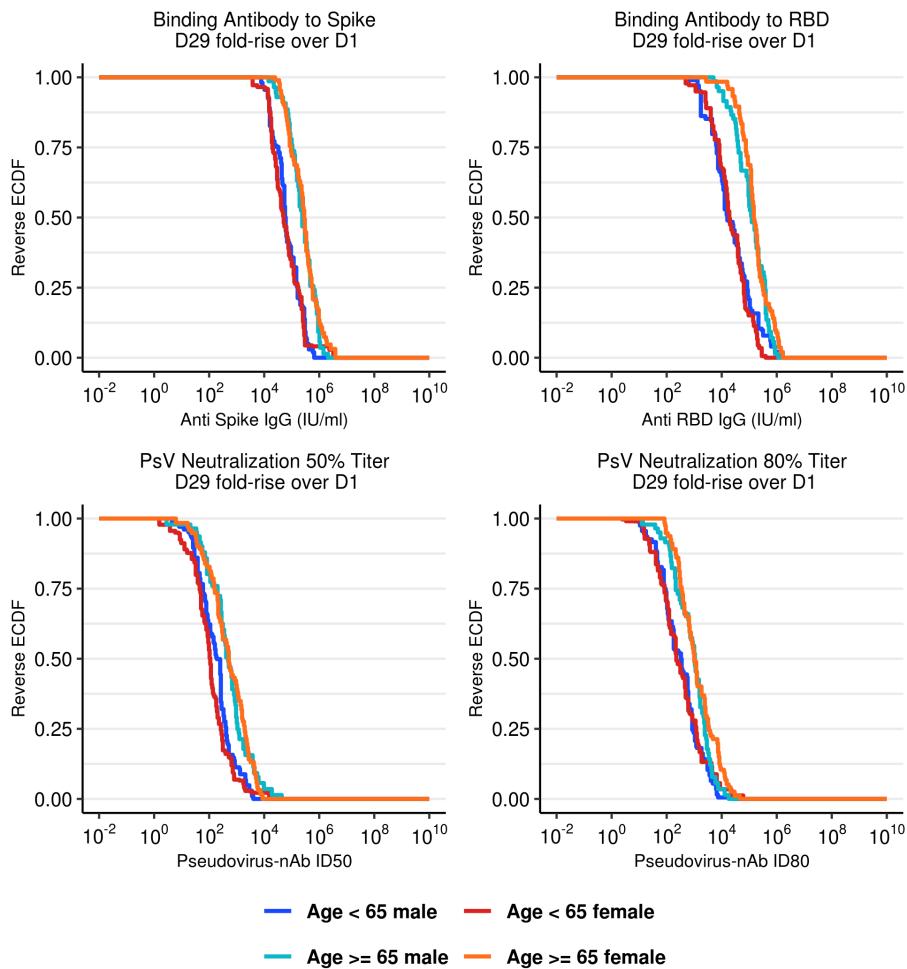


Figure 1.106: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

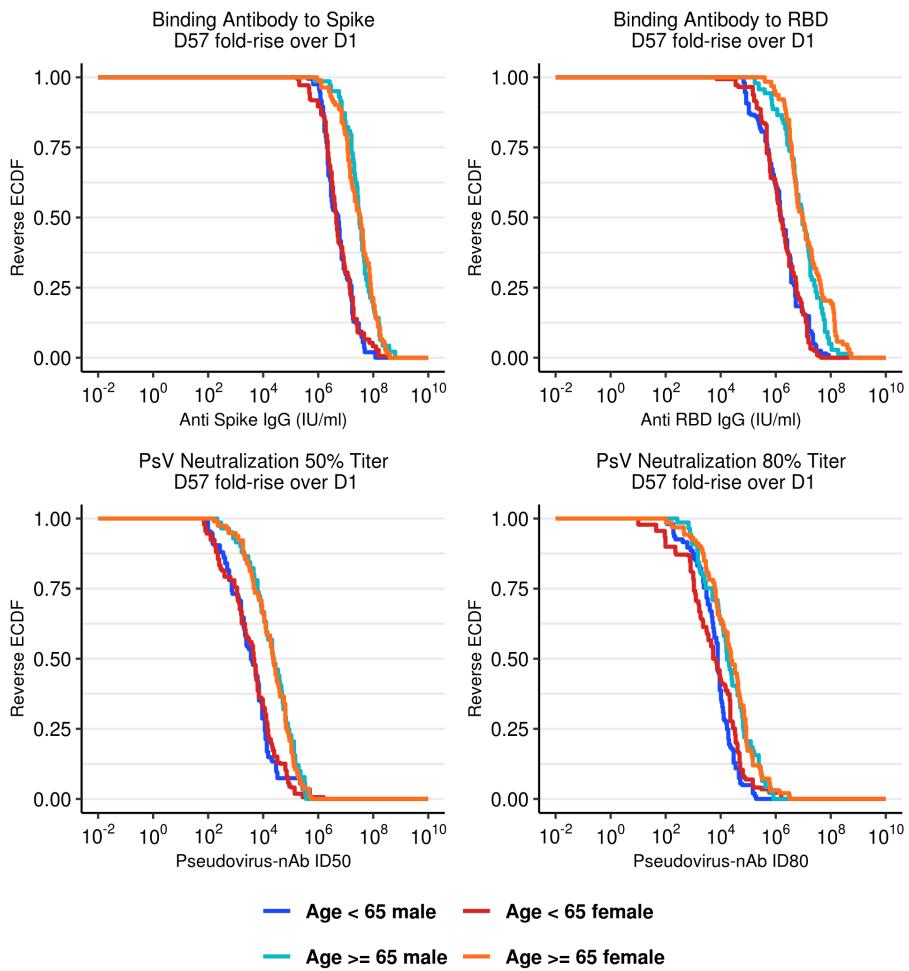


Figure 1.107: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT121

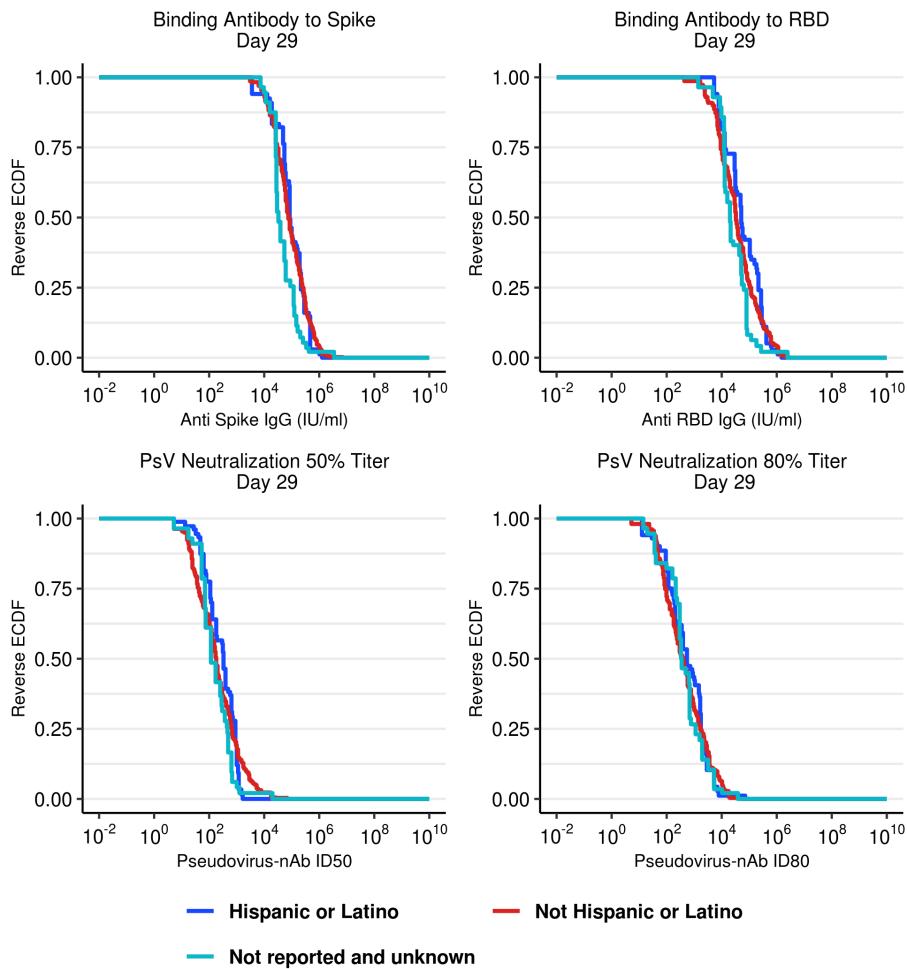


Figure 1.108: RCDF plots for D29 Ab markers: baseline positive vaccine arm by ethnicity.

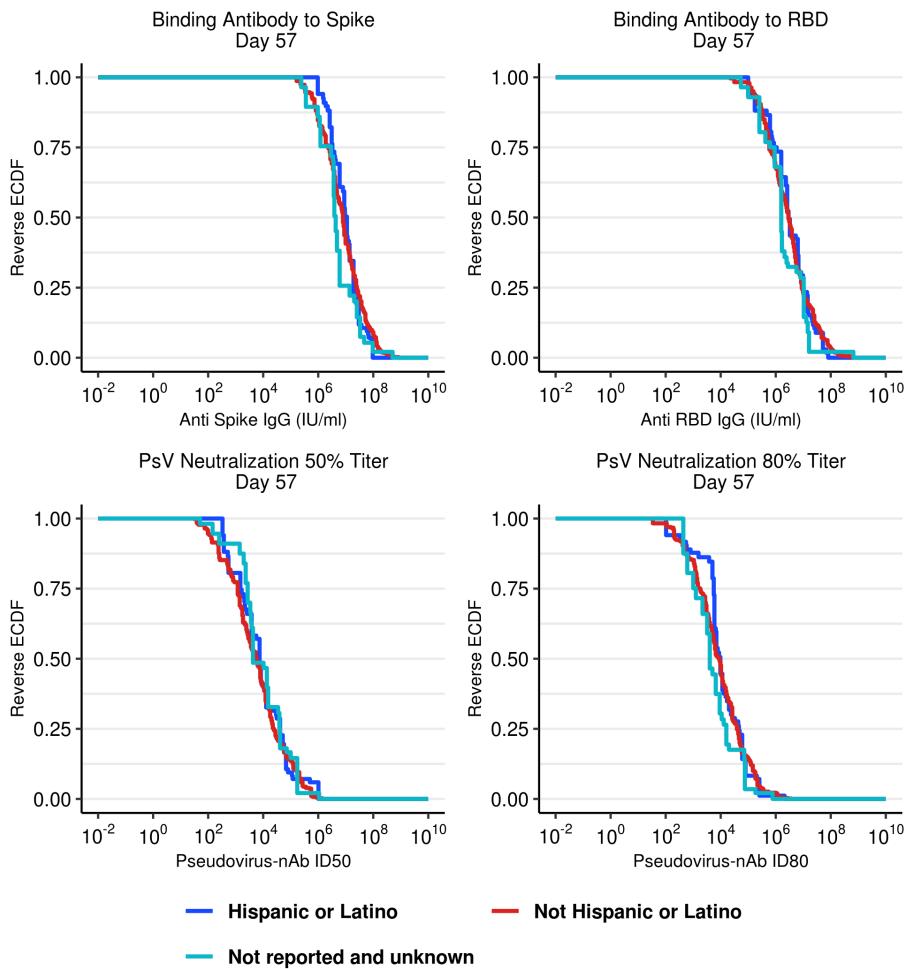


Figure 1.109: RCDF plots for D57 Ab markers: baseline positive vaccine arm by ethnicity.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT123

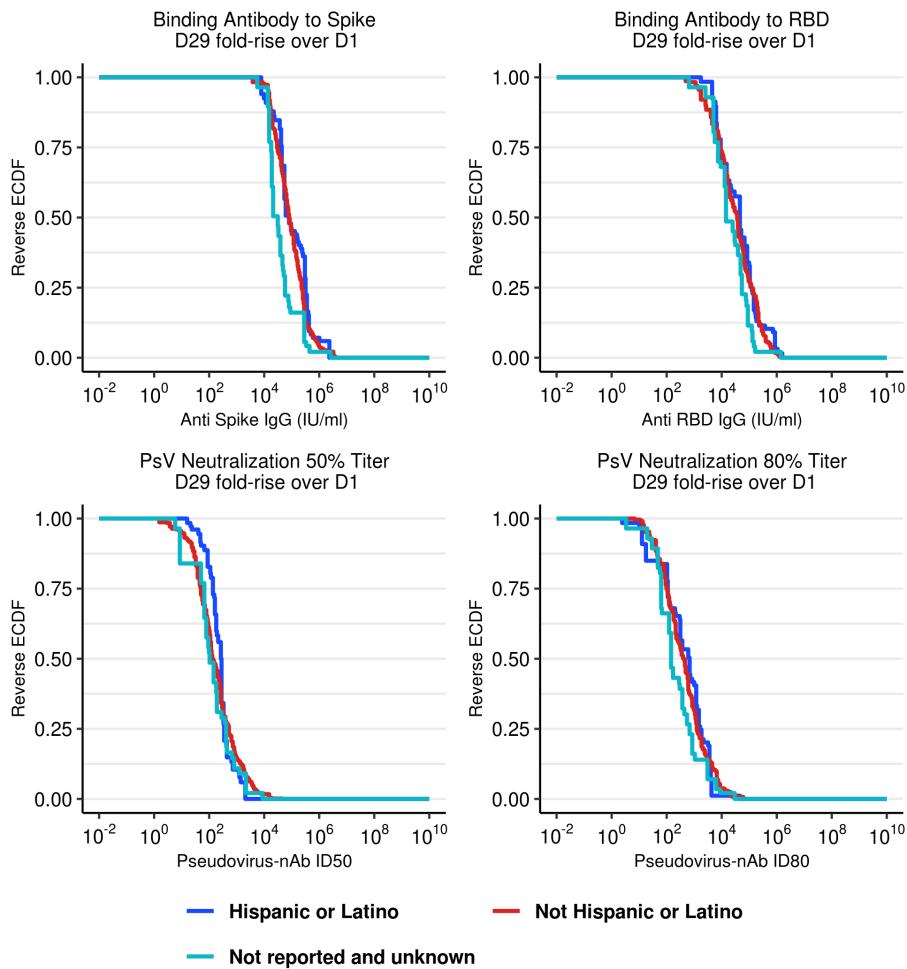


Figure 1.110: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

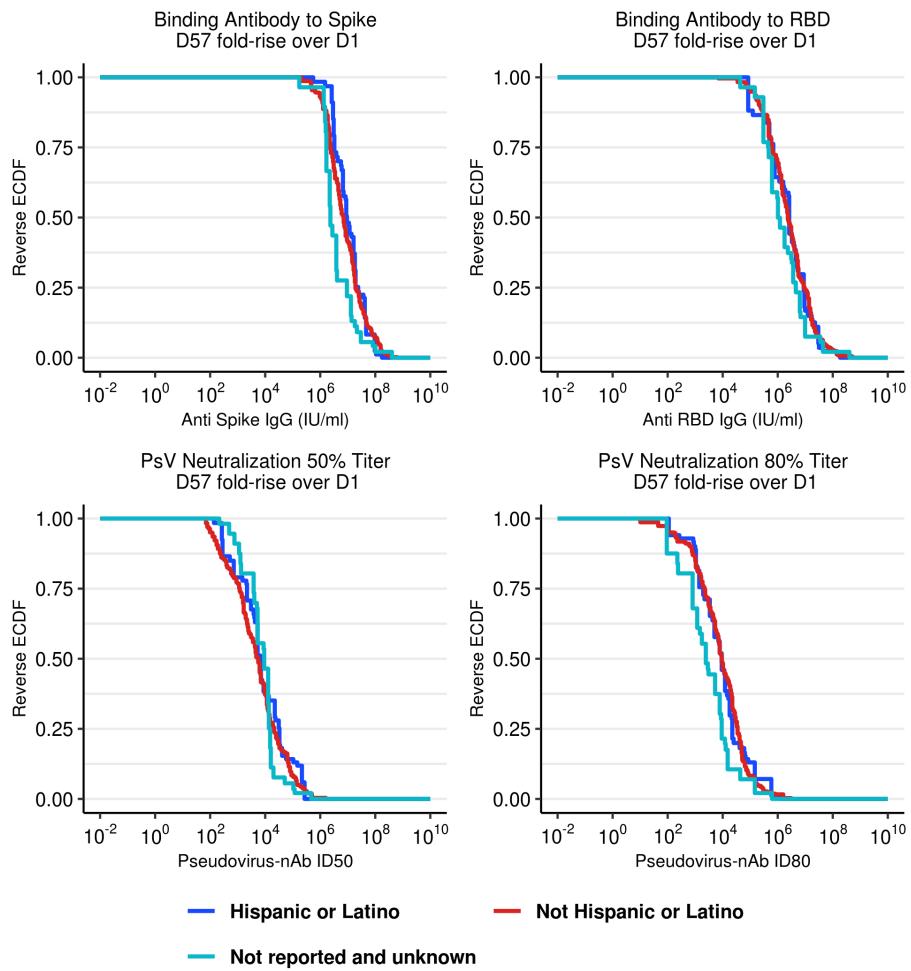


Figure 1.111: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT125

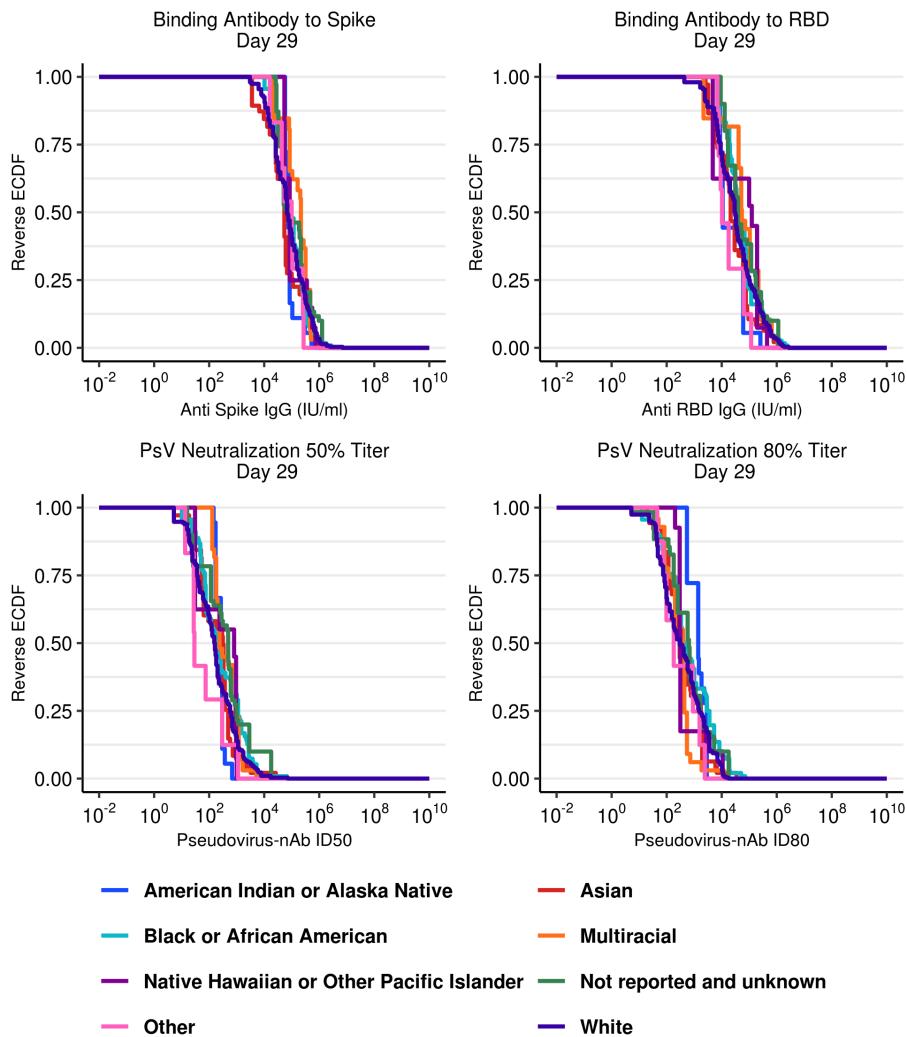


Figure 1.112: RCDF plots for D29 Ab markers: baseline positive vaccine arm by race.

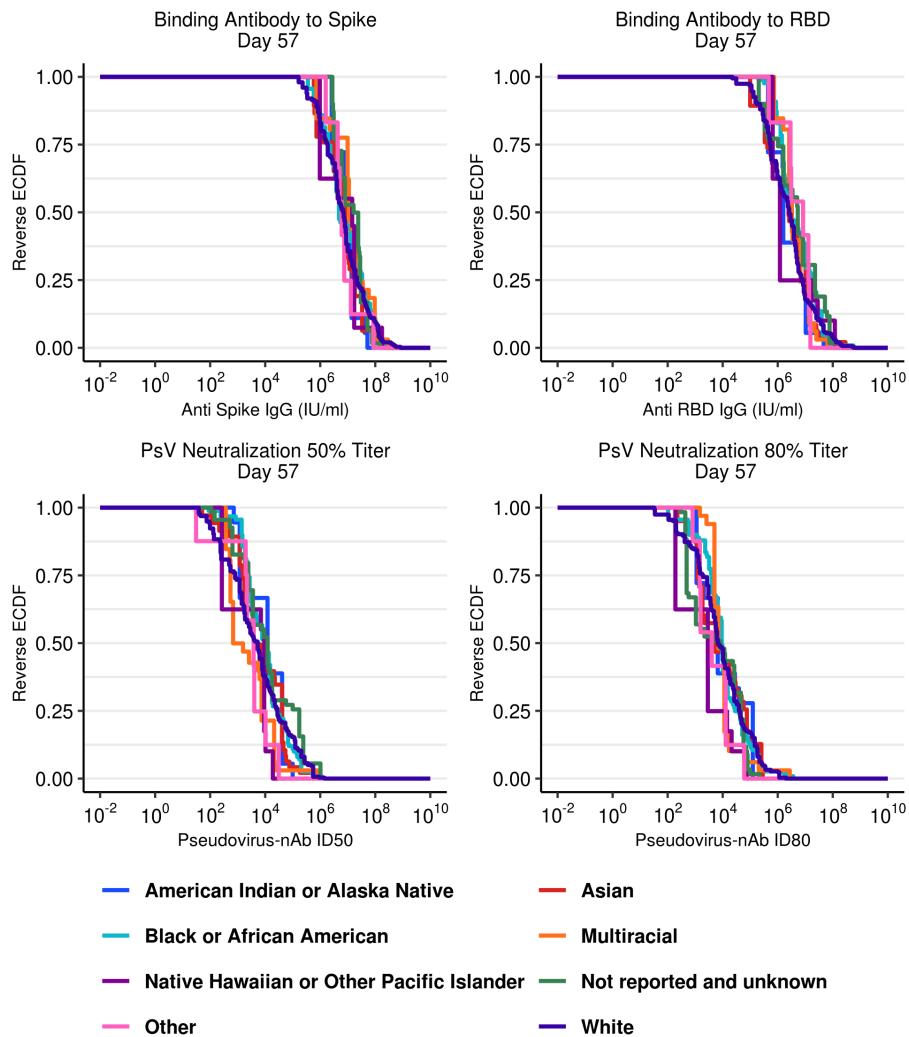


Figure 1.113: RCDF plots for D57 Ab markers: baseline positive vaccine arm by race.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT127

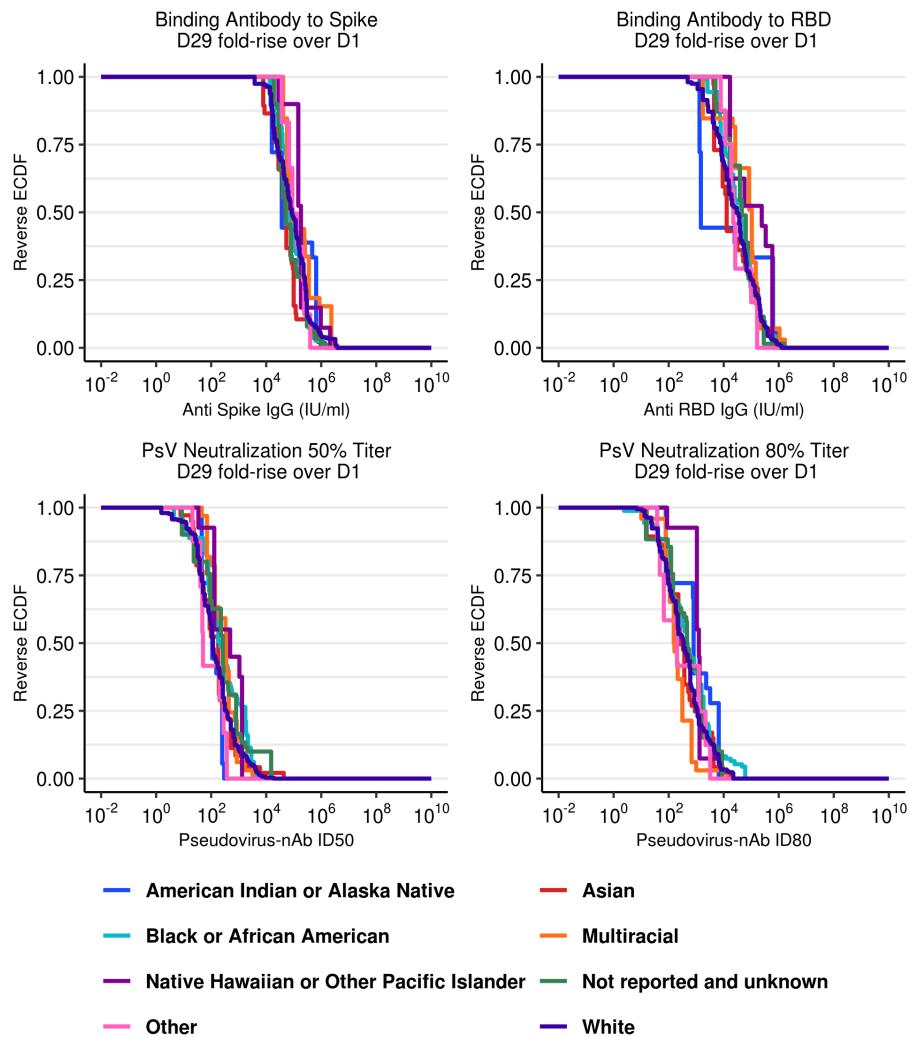


Figure 1.114: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

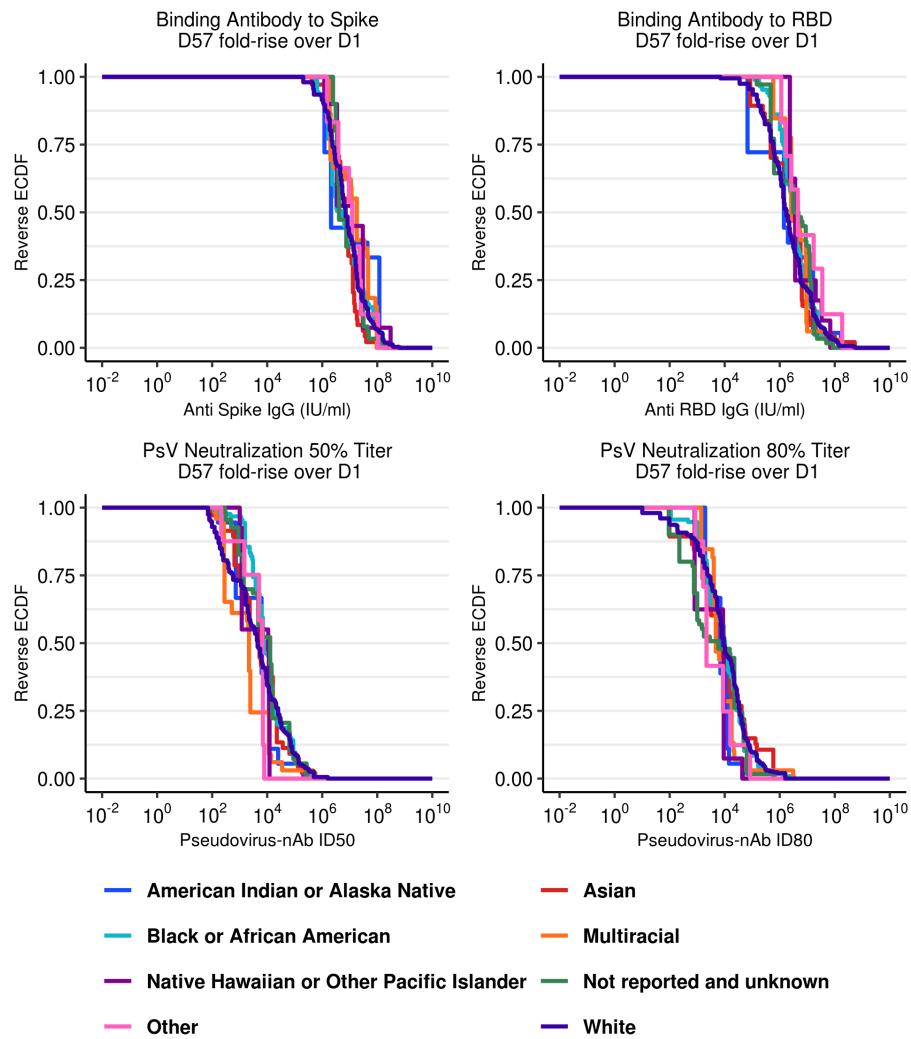


Figure 1.115: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT129

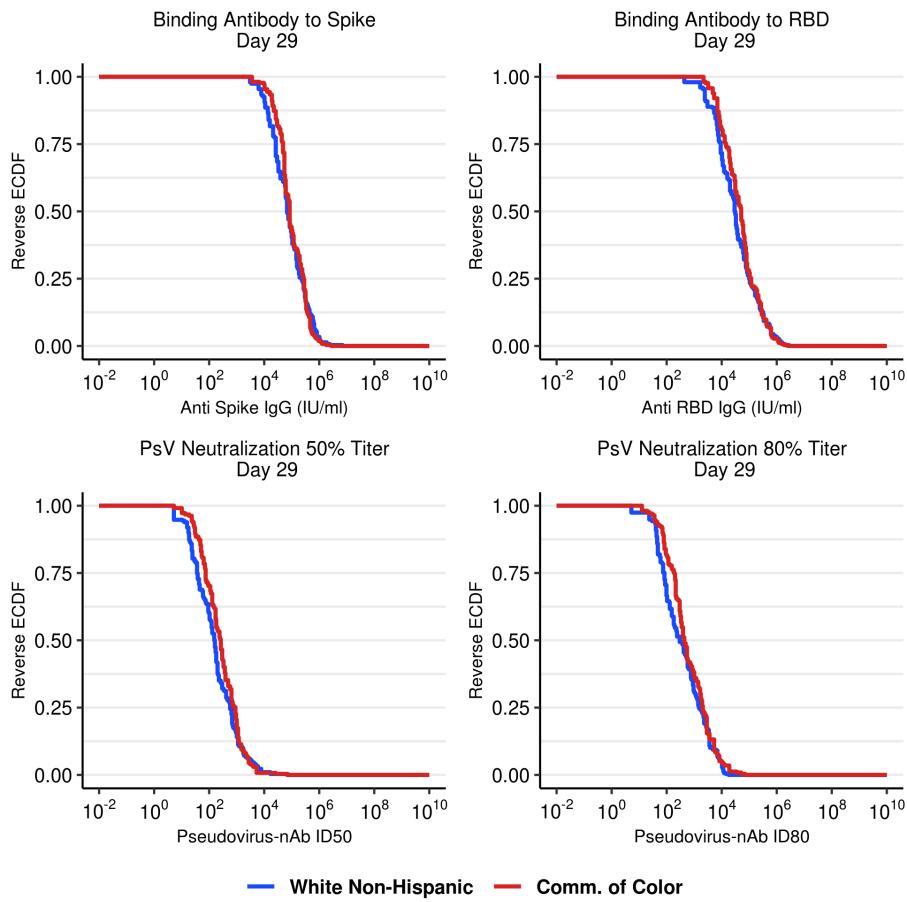


Figure 1.116: RCDF plots for D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

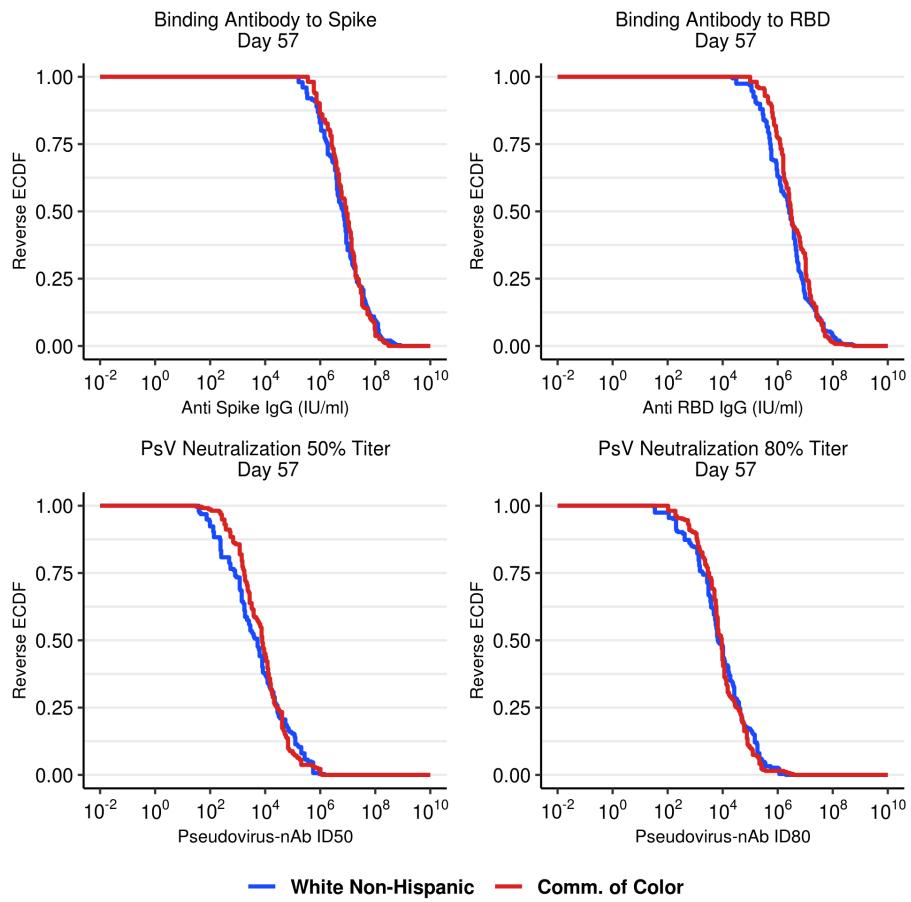


Figure 1.117: RCDF plots for D57 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT131

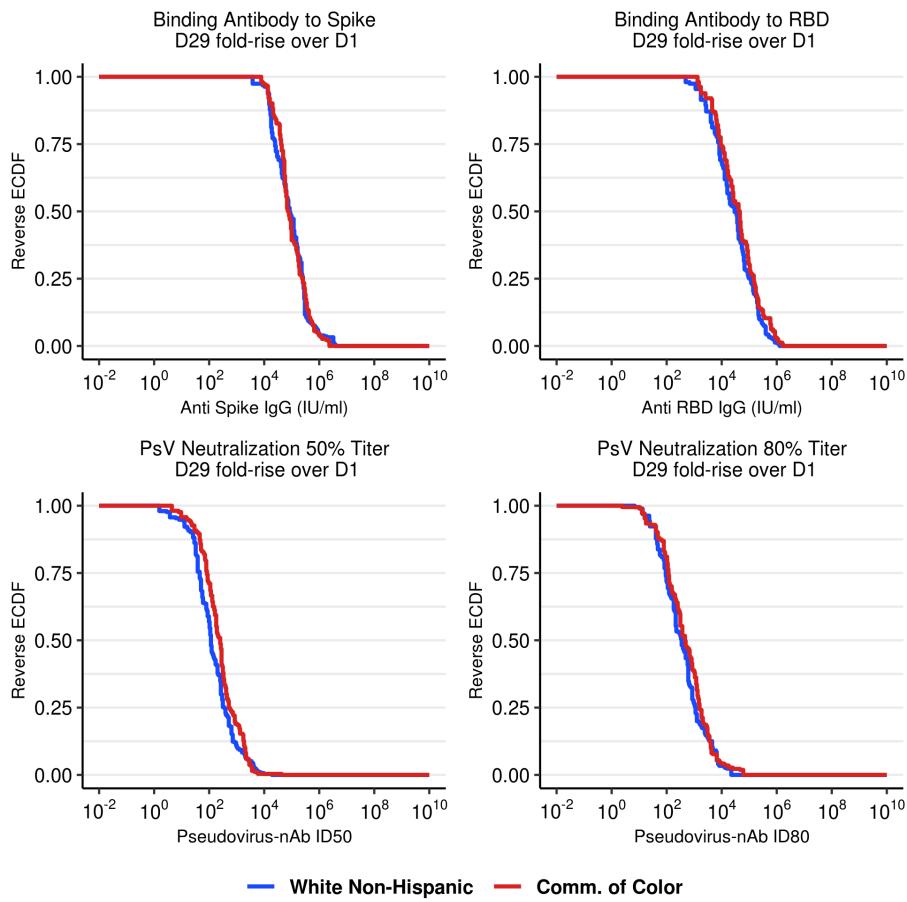


Figure 1.118: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

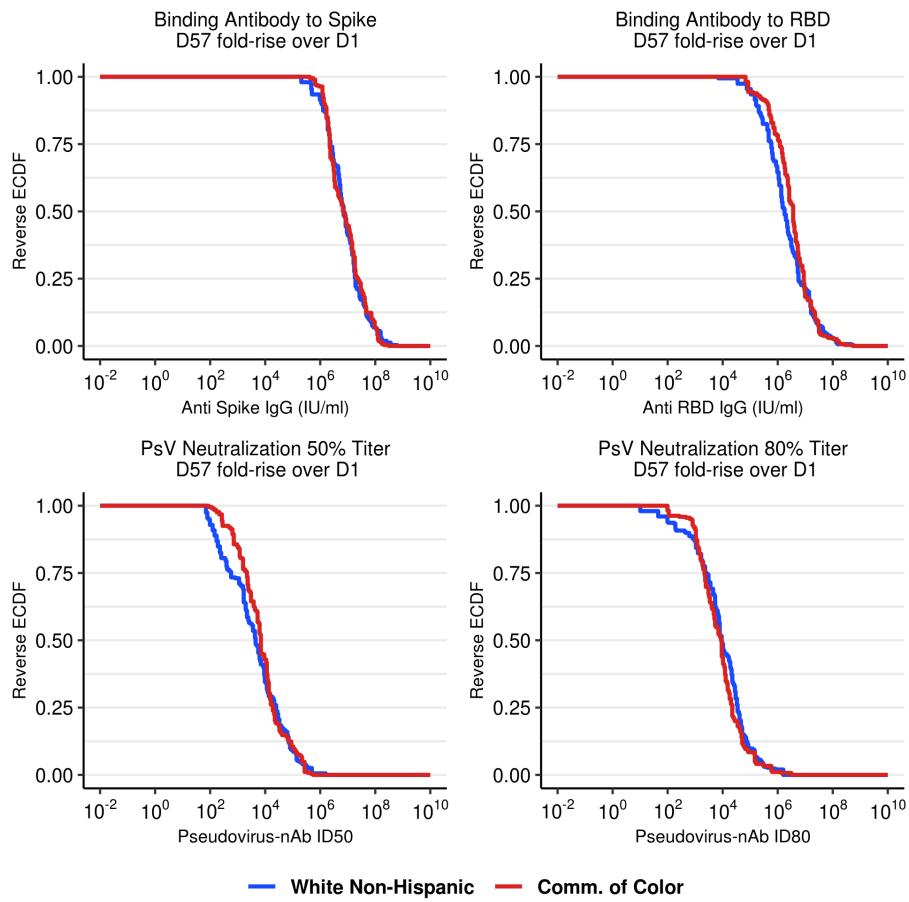


Figure 1.119: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT133

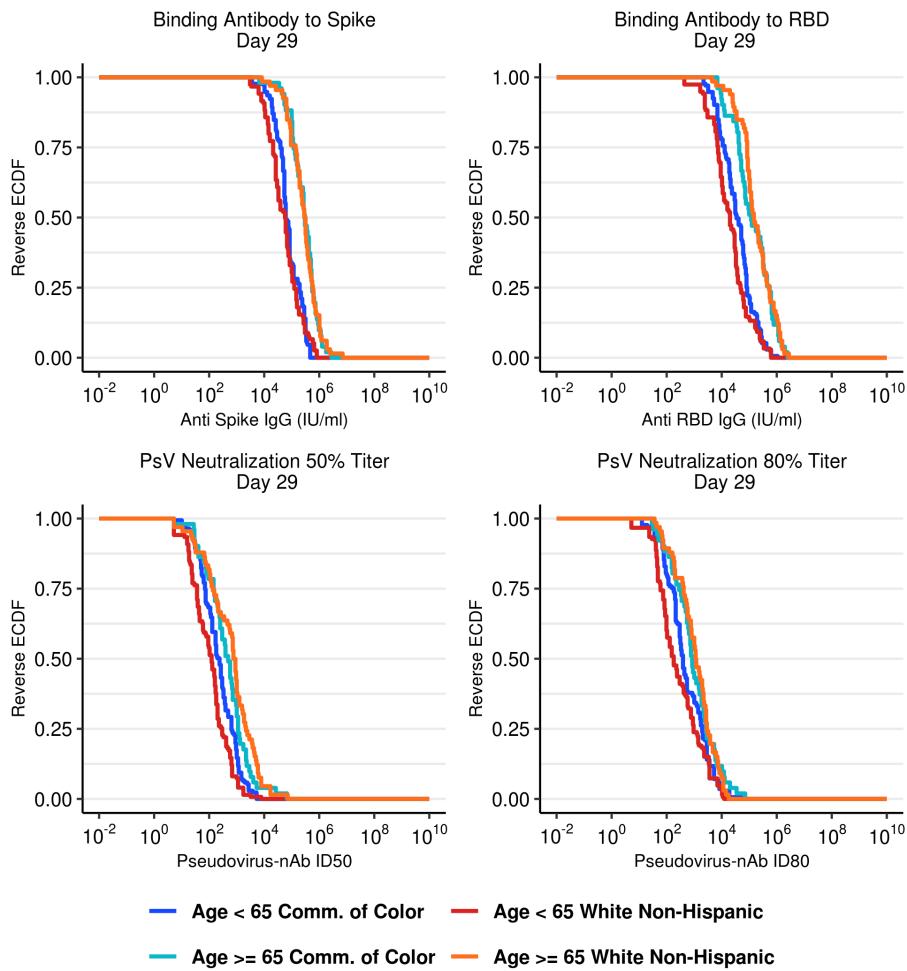


Figure 1.120: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

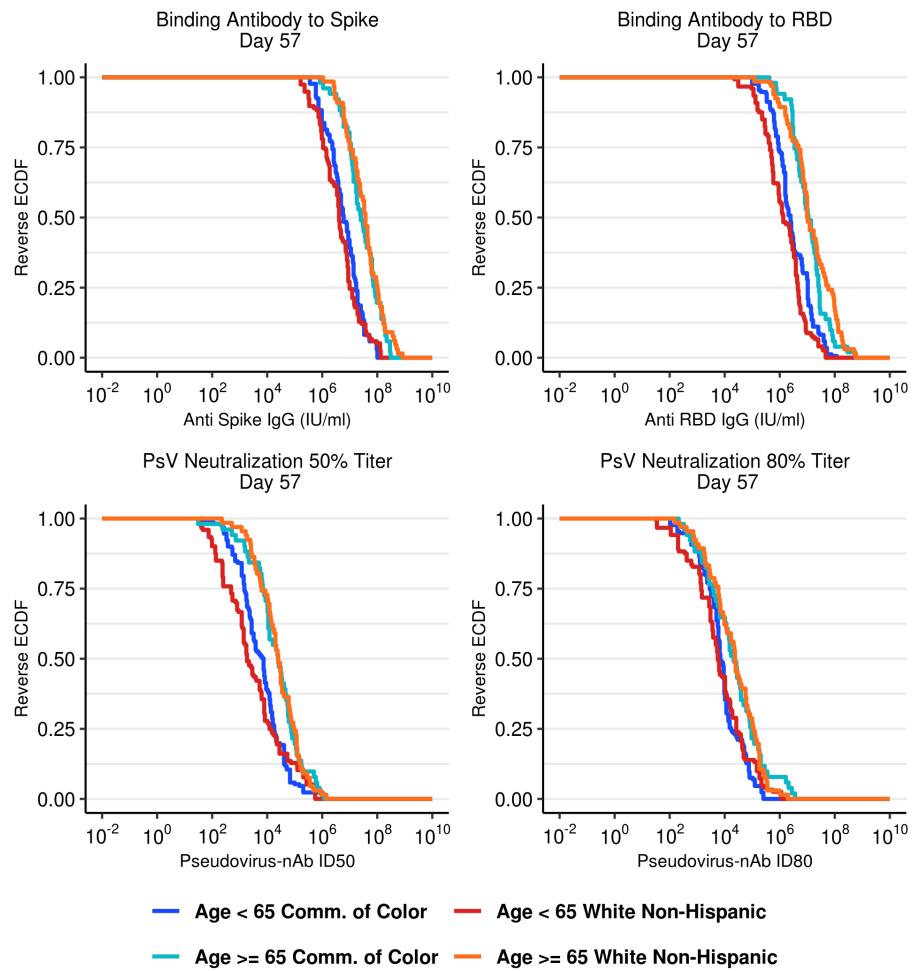


Figure 1.121: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

1.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT135

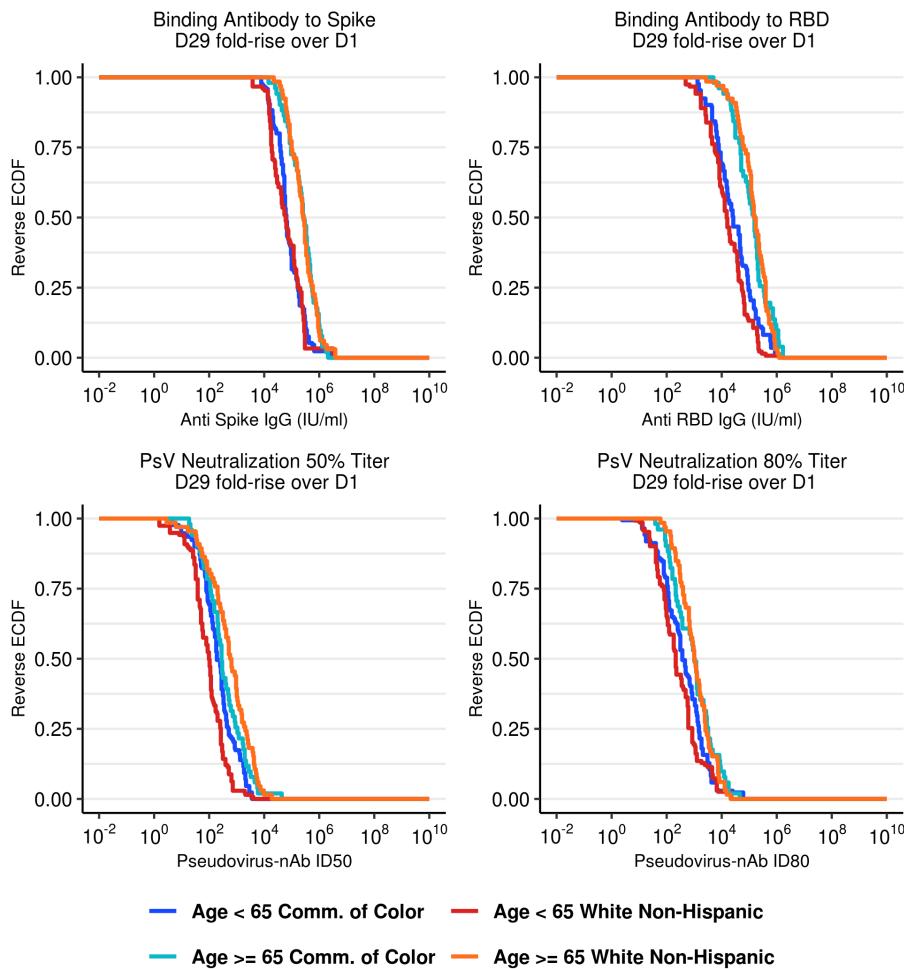


Figure 1.122: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

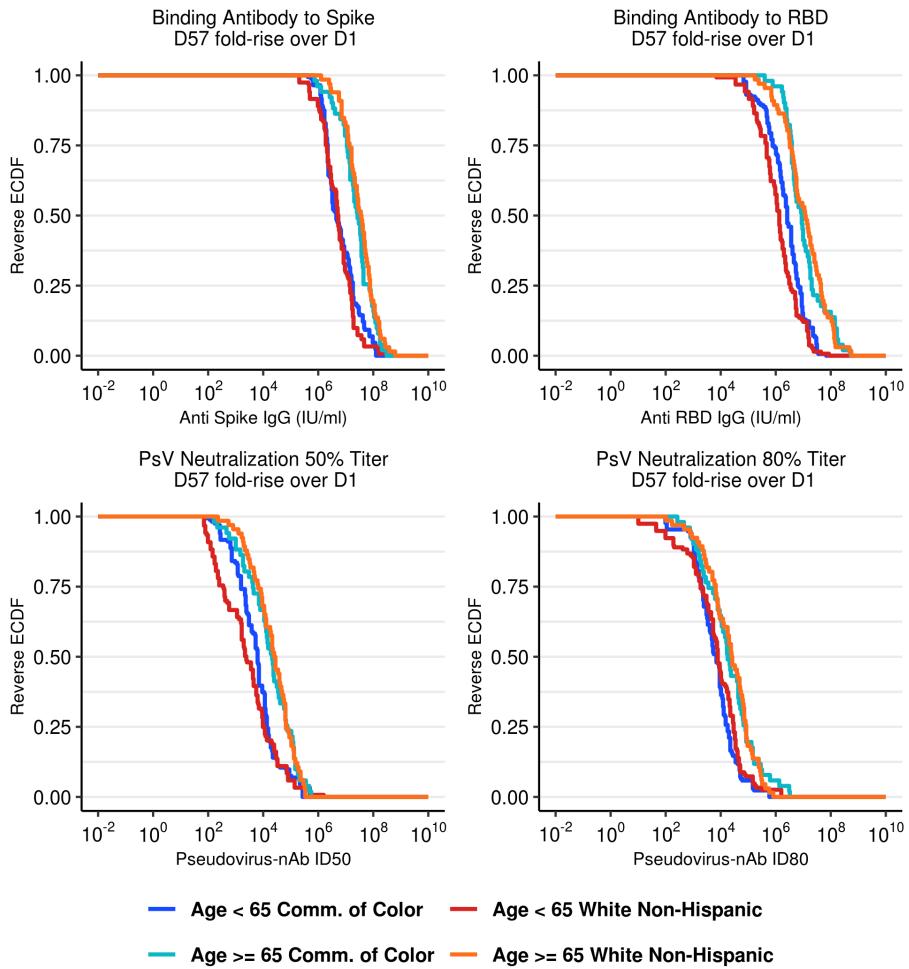


Figure 1.123: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

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

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT137

1.7.1 Baseline SARS-CoV-2 negative

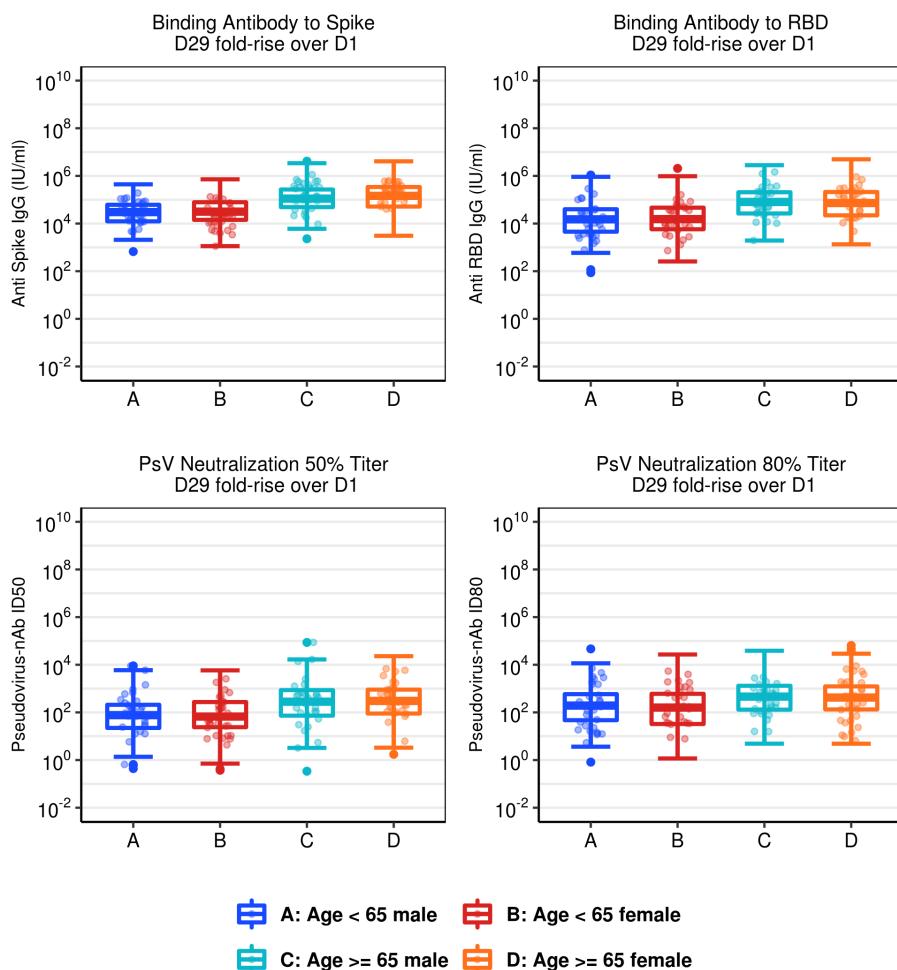


Figure 1.124: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

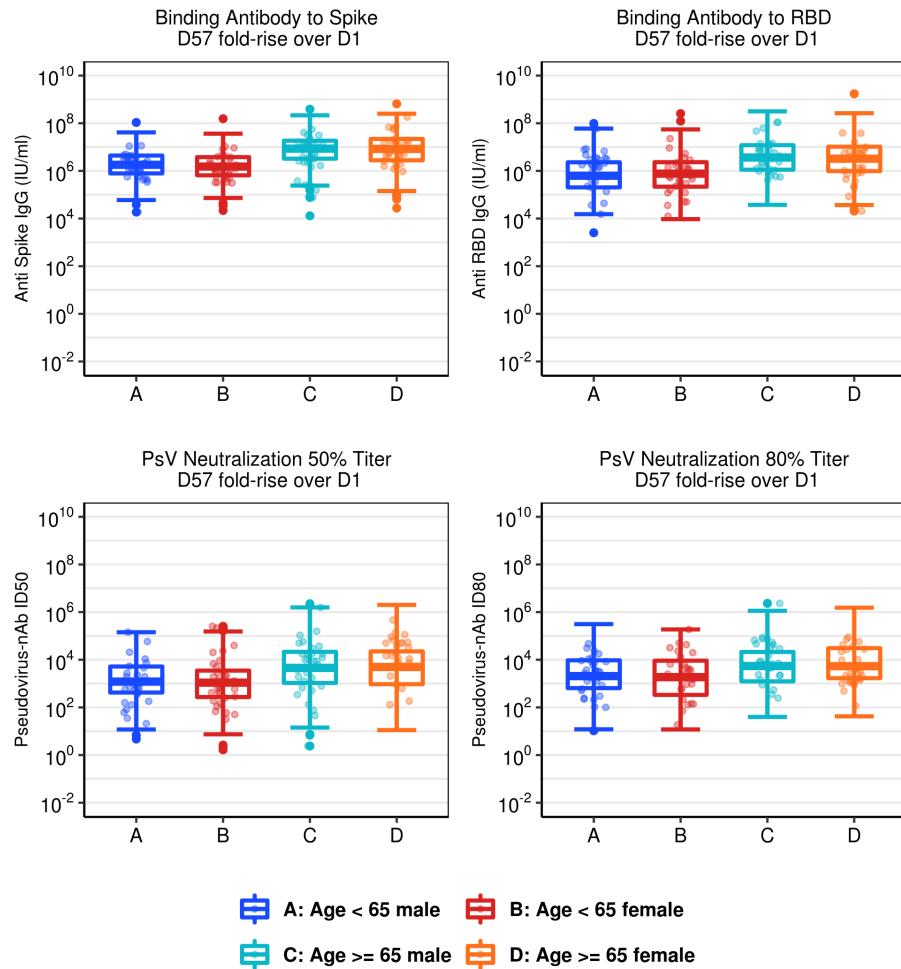


Figure 1.125: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT139

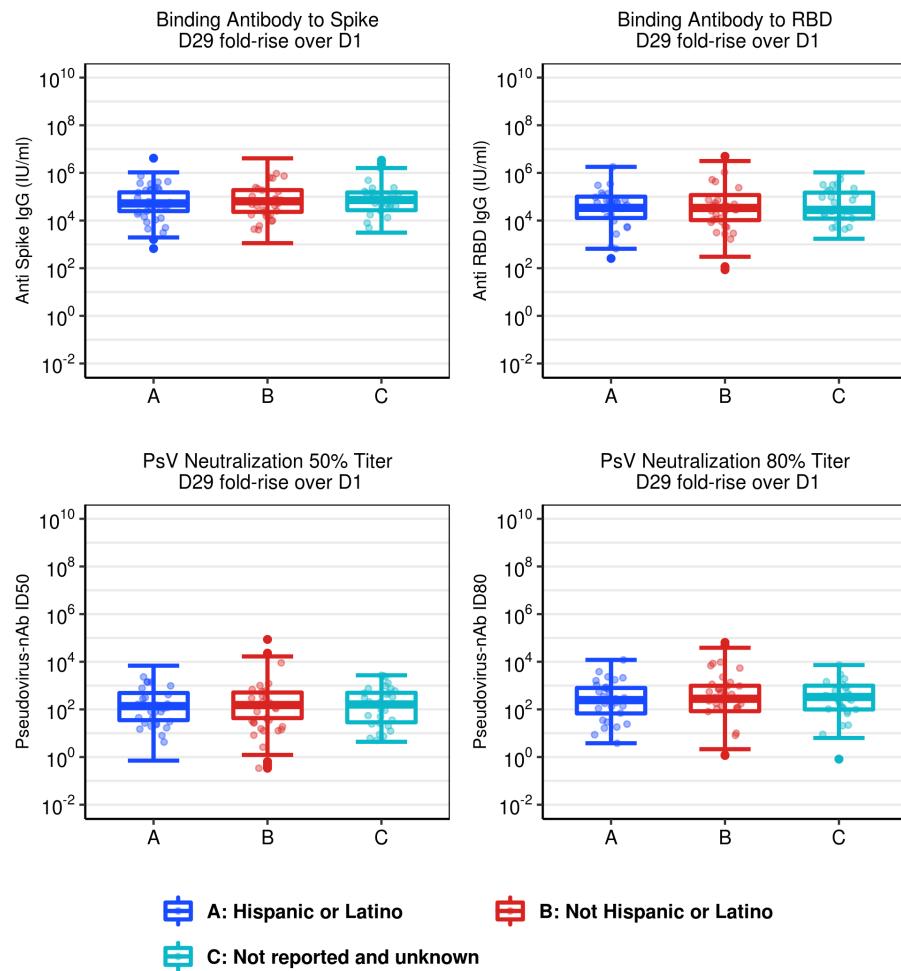


Figure 1.126: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.

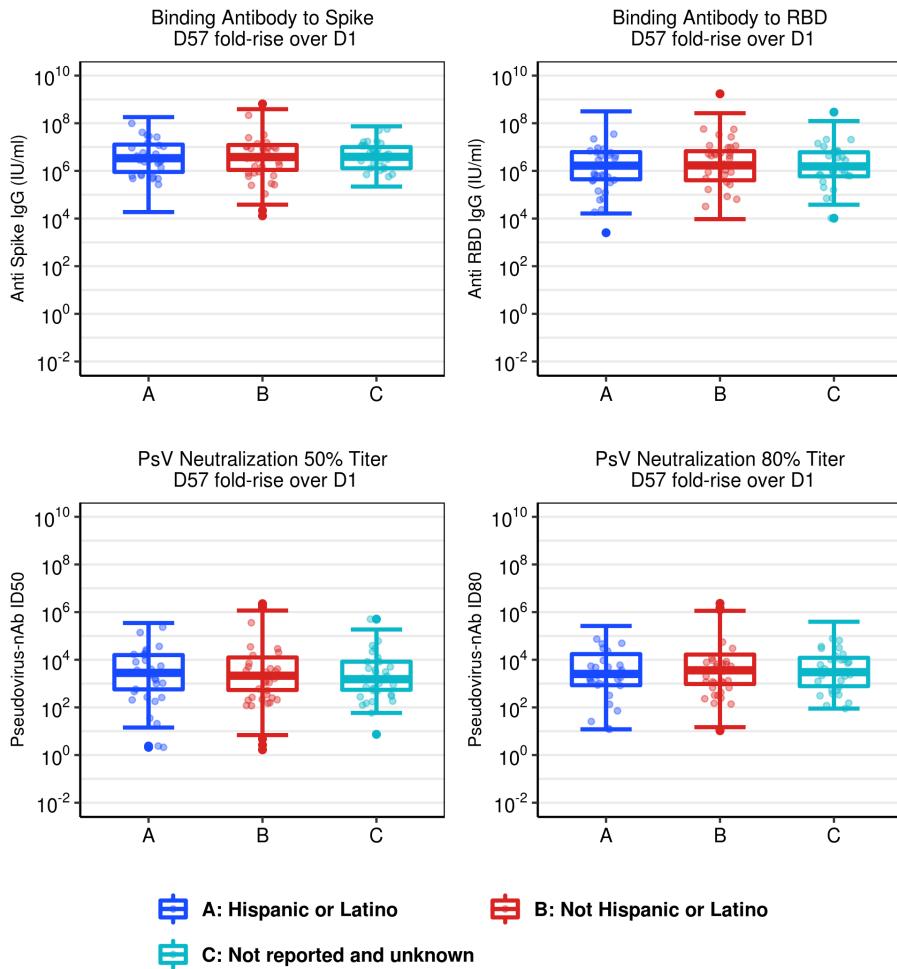


Figure 1.127: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT141

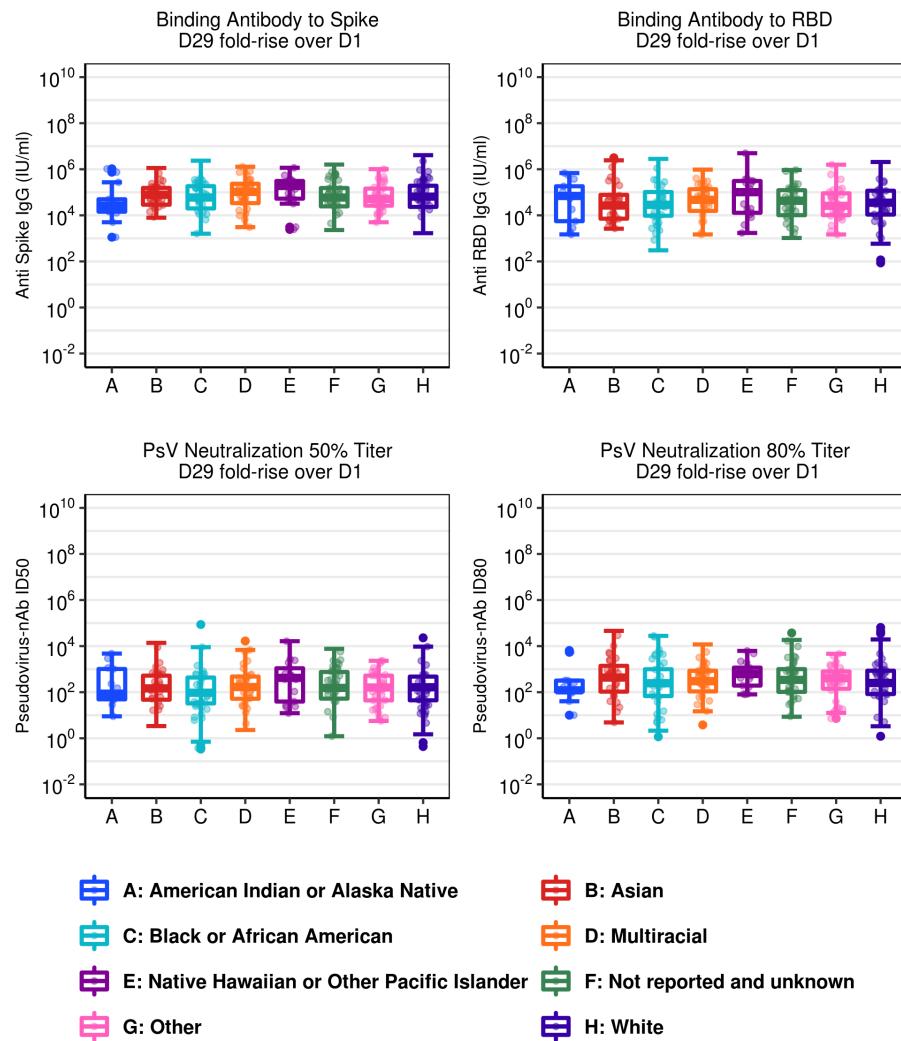


Figure 1.128: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

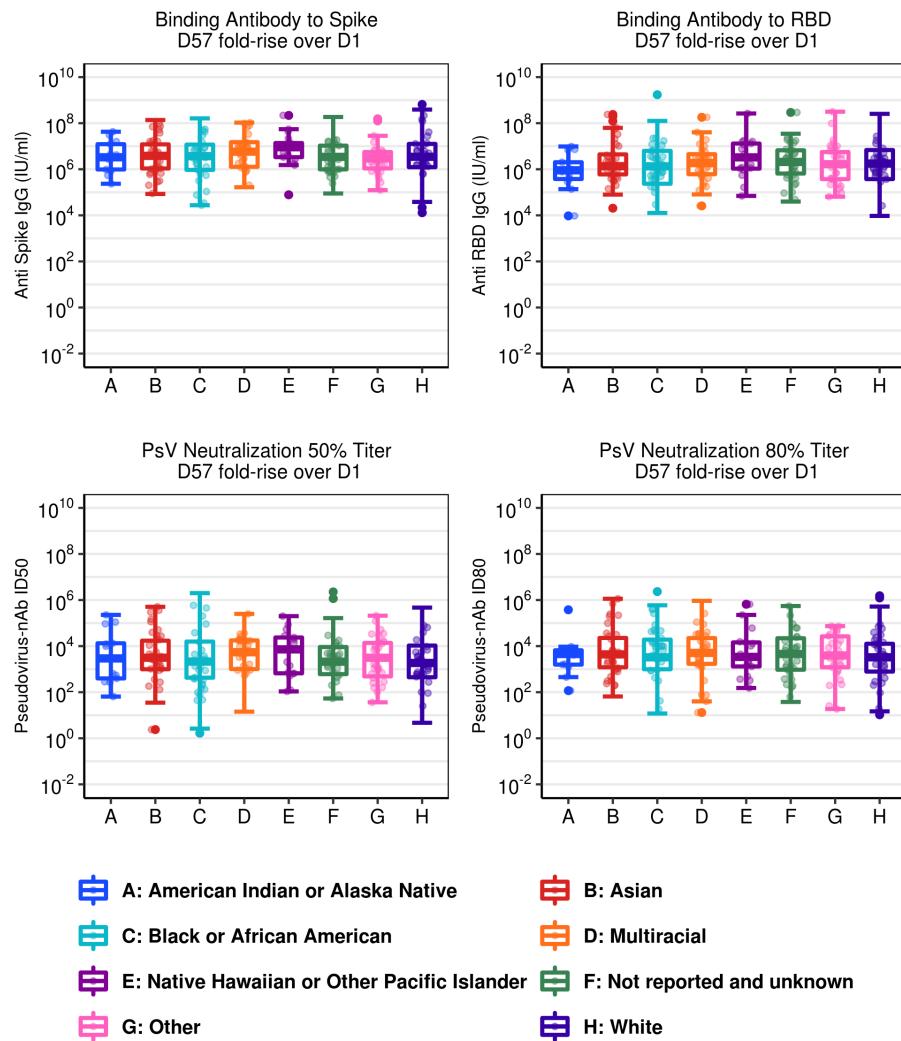


Figure 1.129: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT143

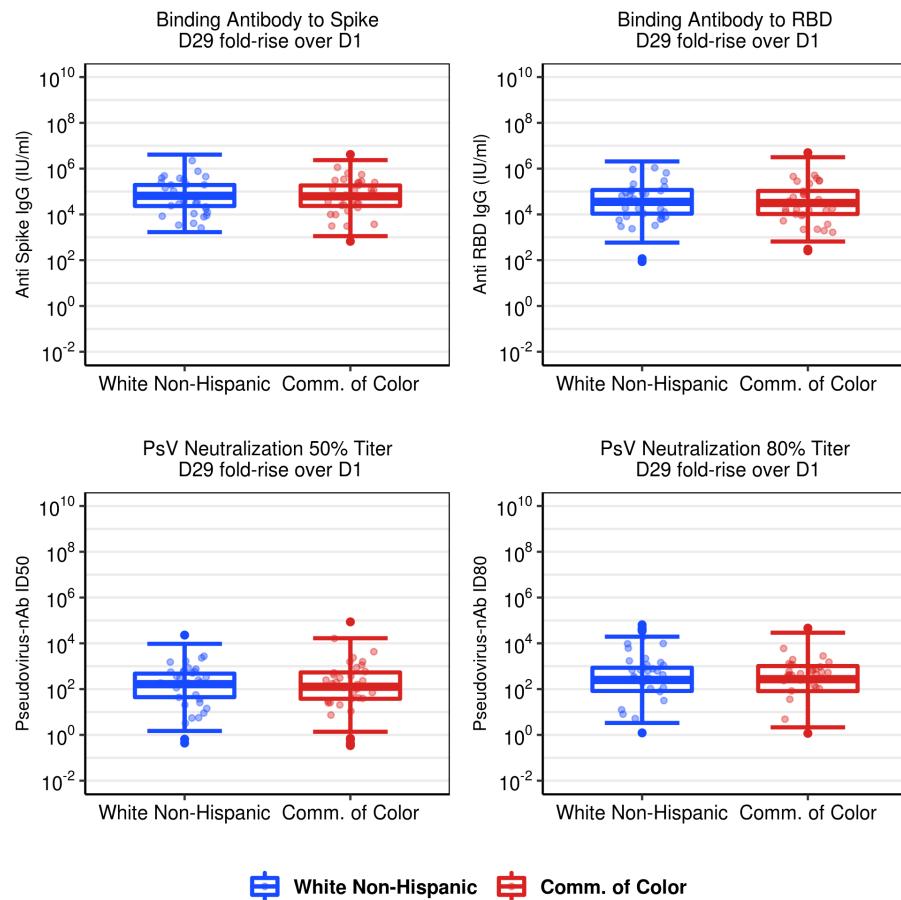


Figure 1.130: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.

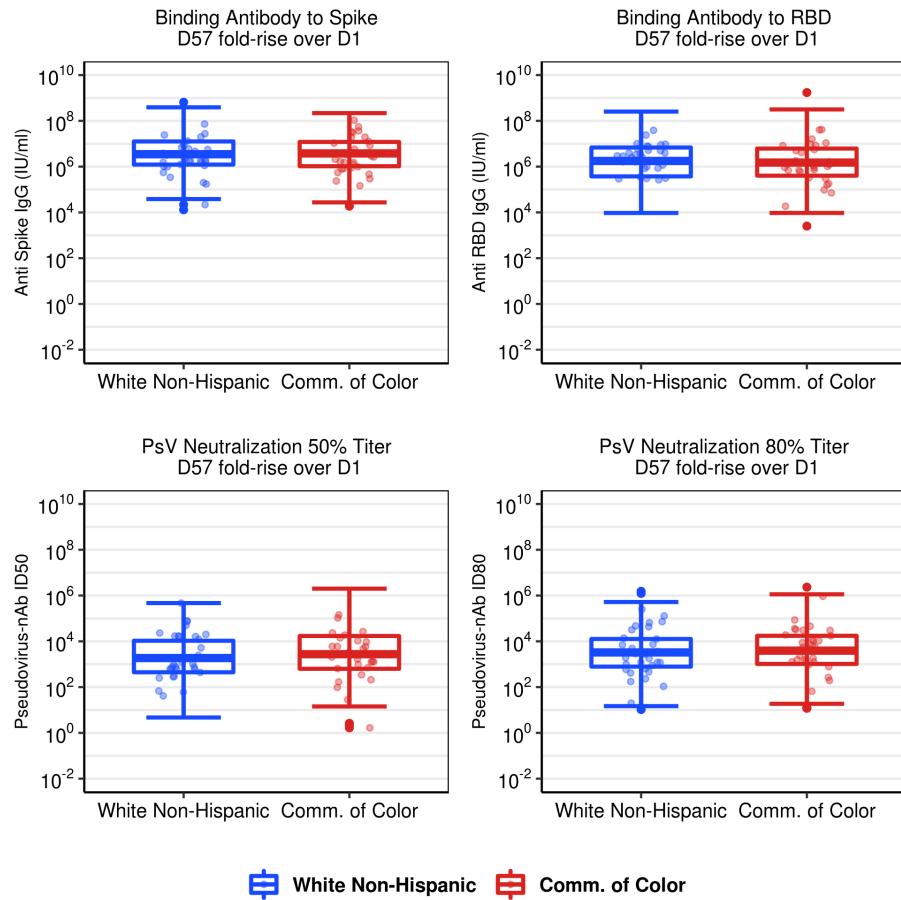


Figure 1.131: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT145

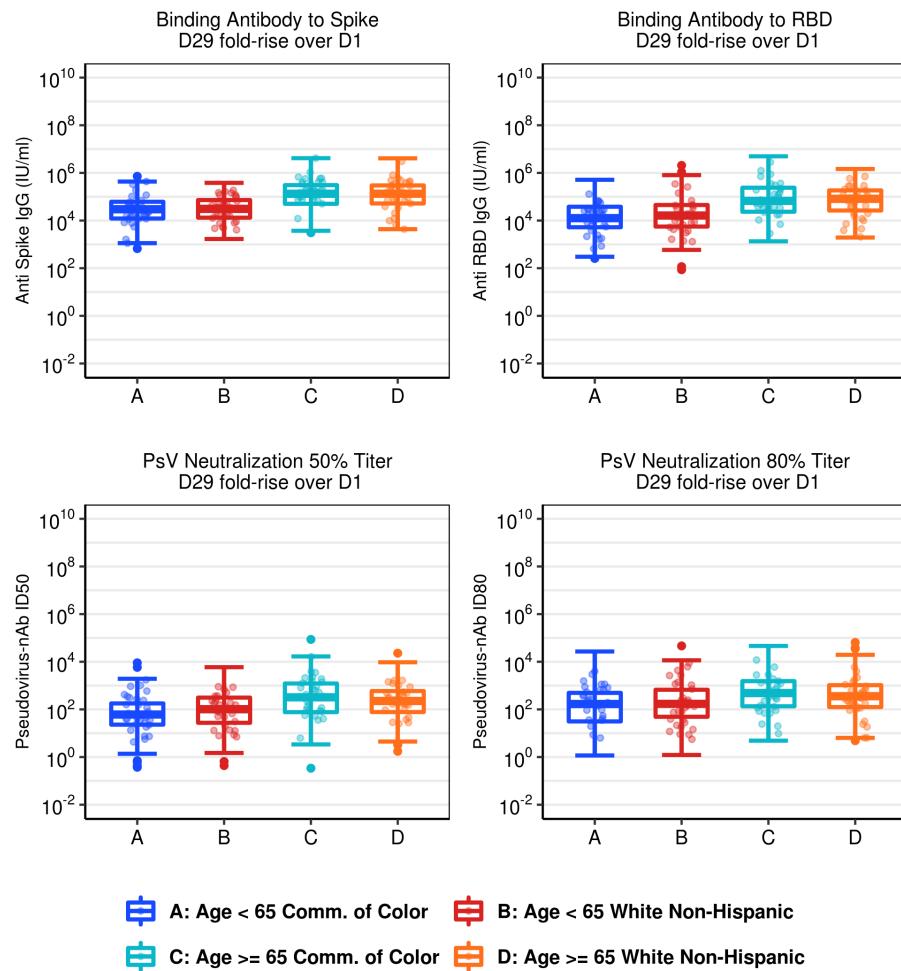


Figure 1.132: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

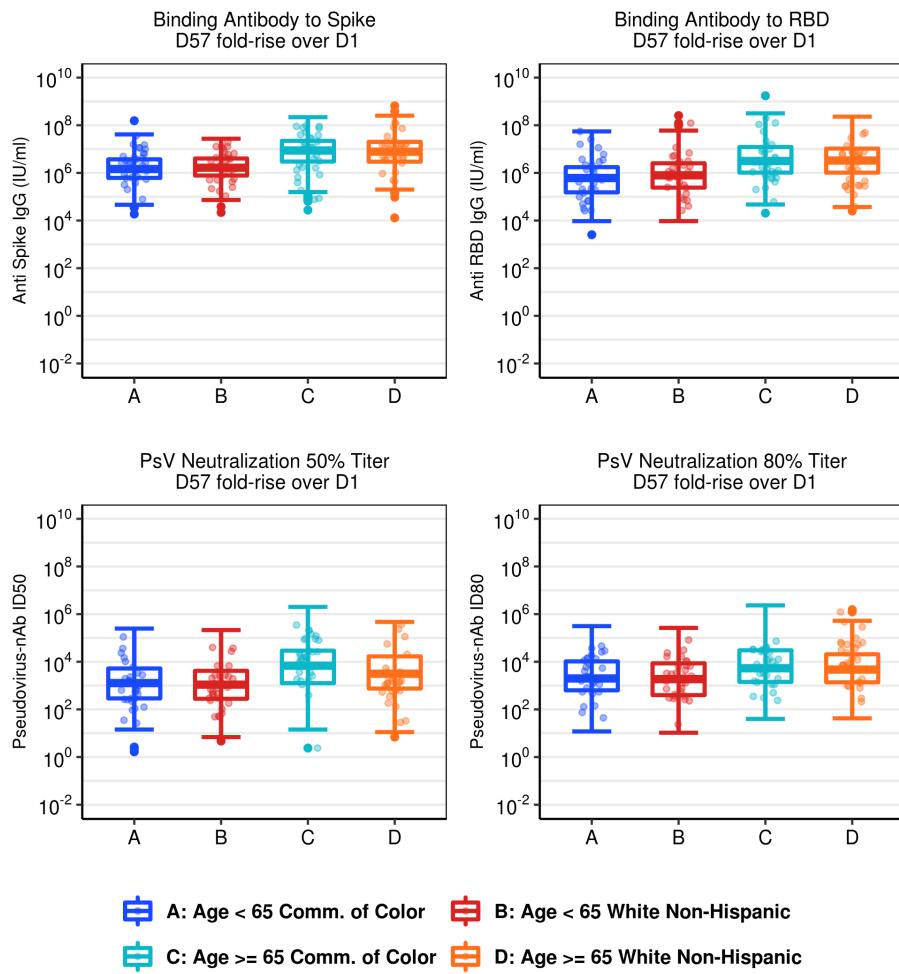


Figure 1.133: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT147

1.7.2 Baseline SARS-CoV-2 positive

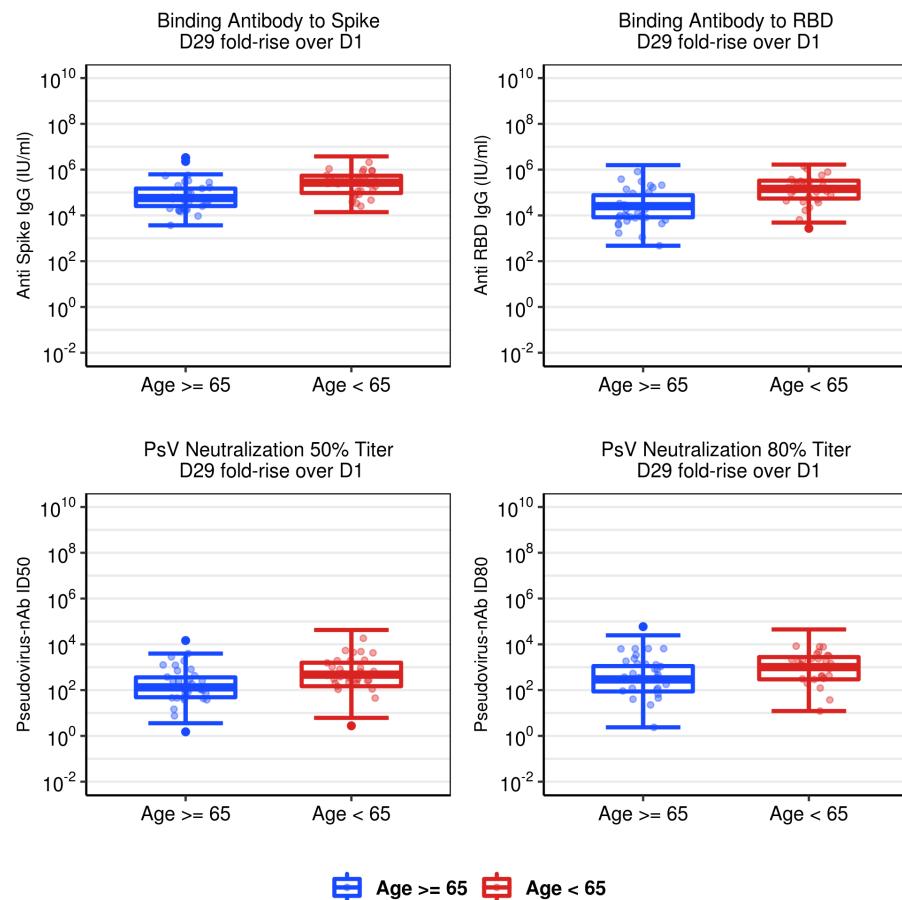


Figure 1.134: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

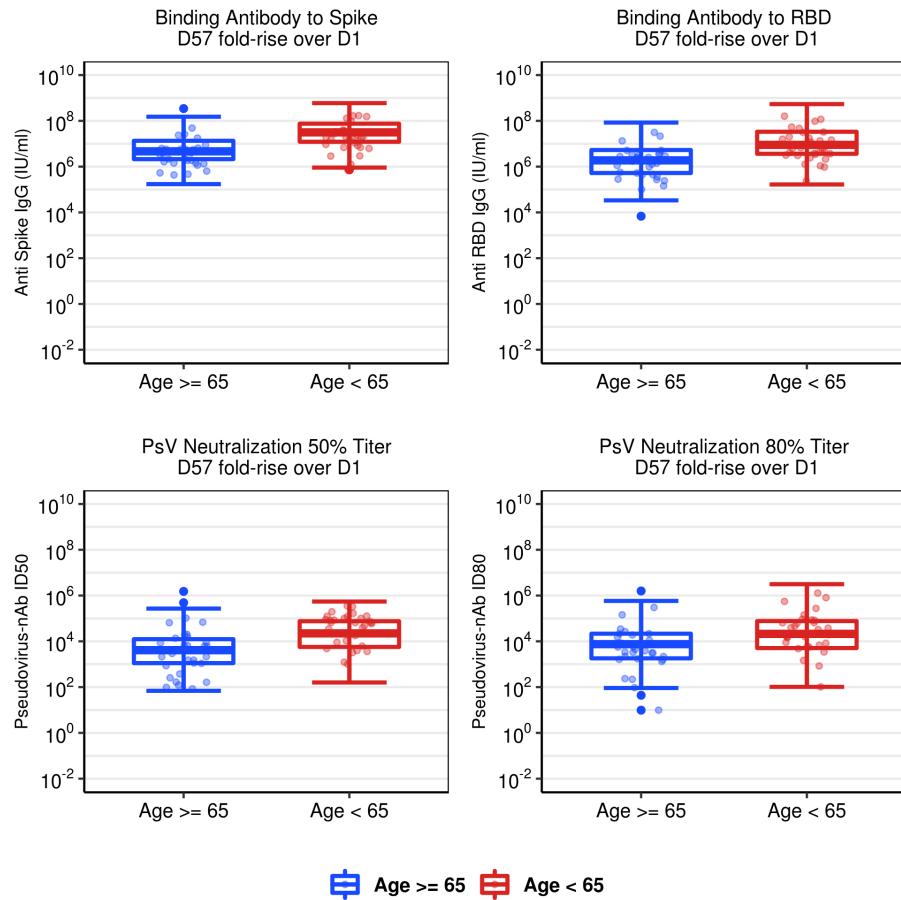


Figure 1.135: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT149

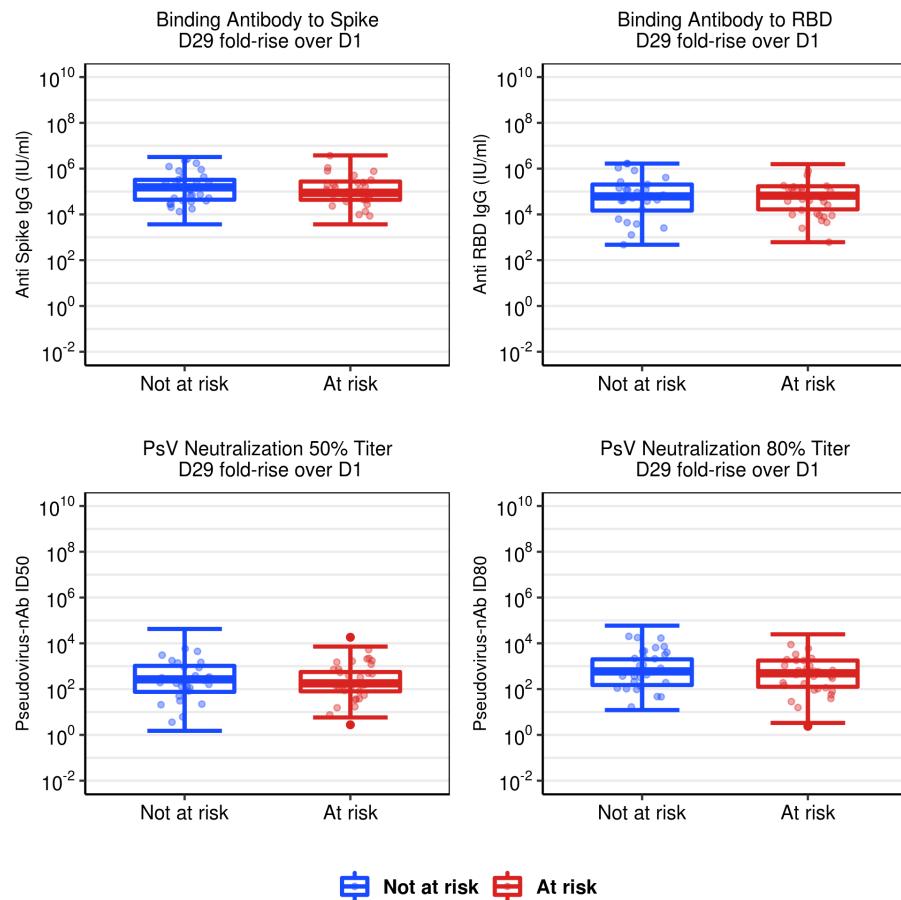


Figure 1.136: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

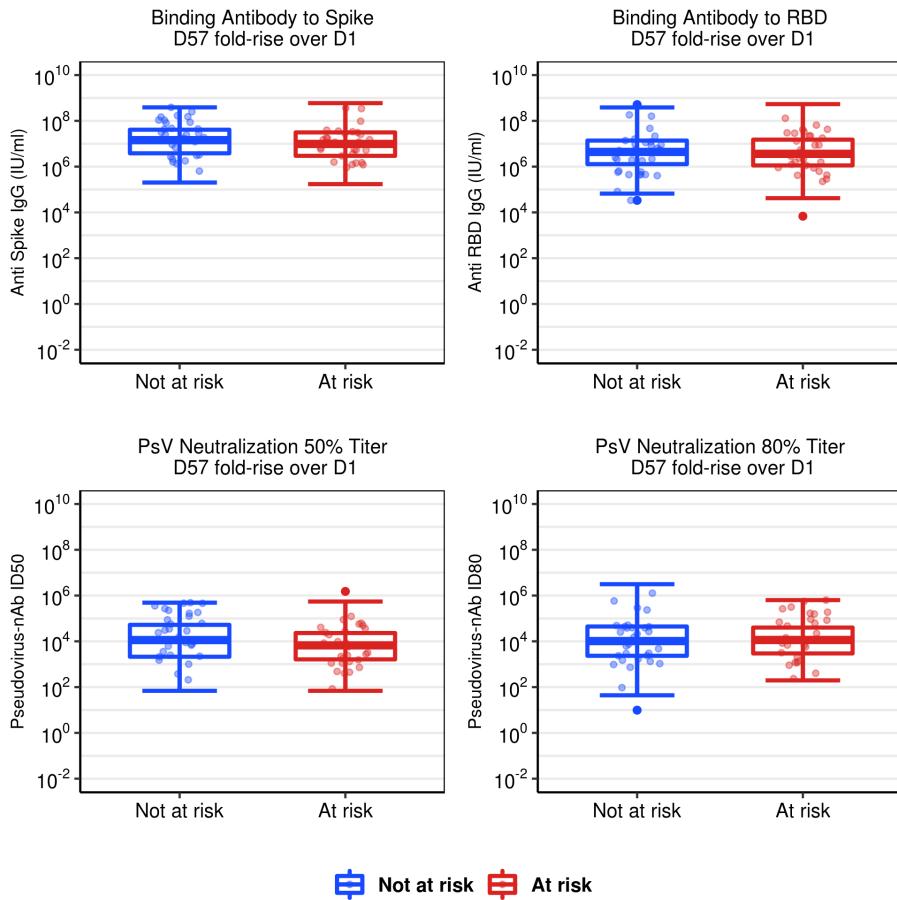


Figure 1.137: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT151

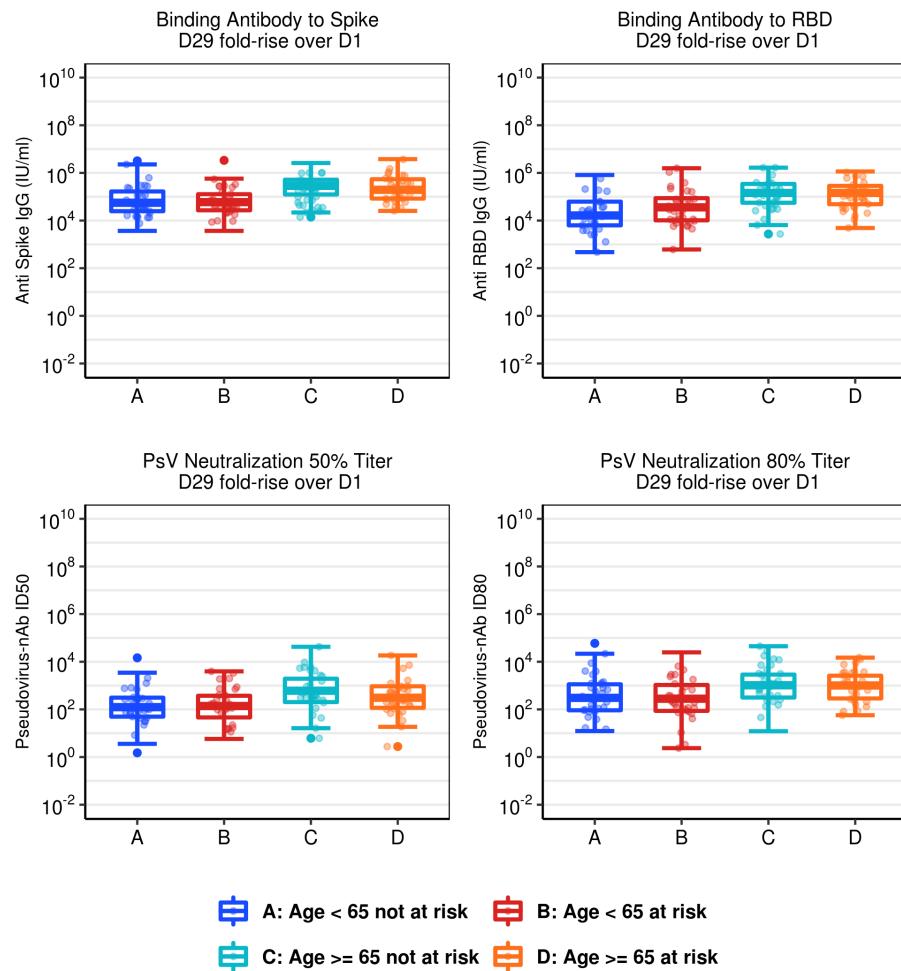


Figure 1.138: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

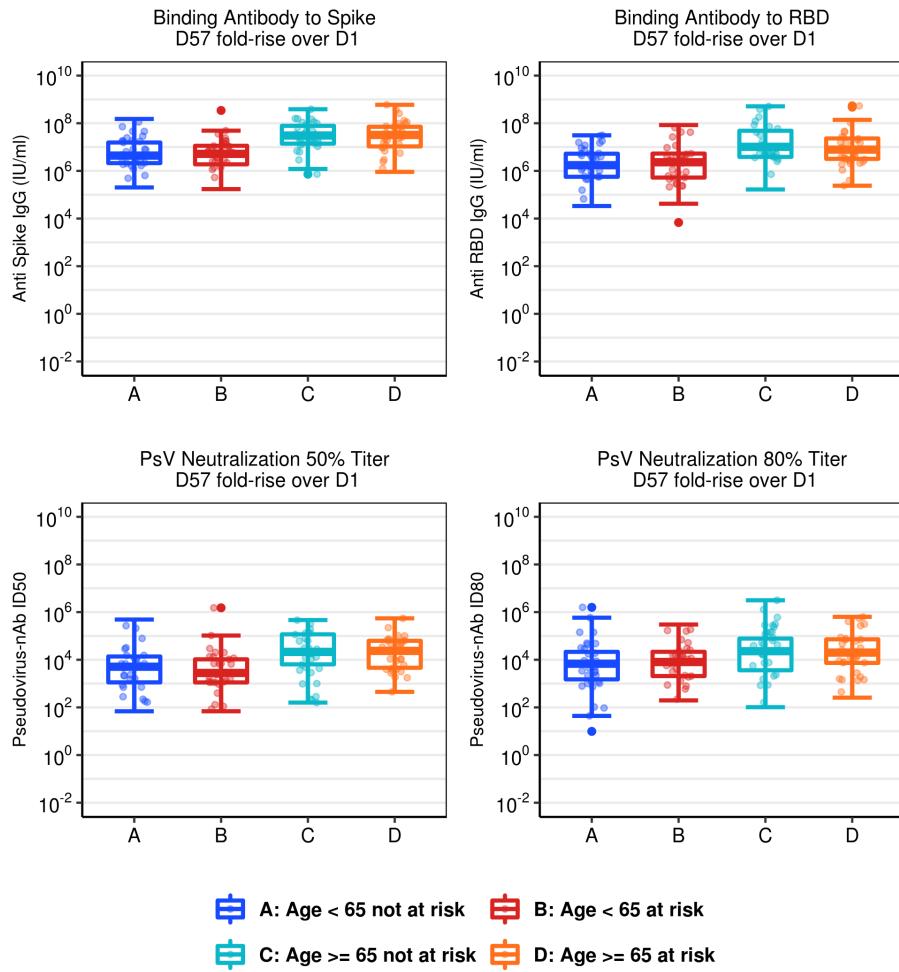


Figure 1.139: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT153

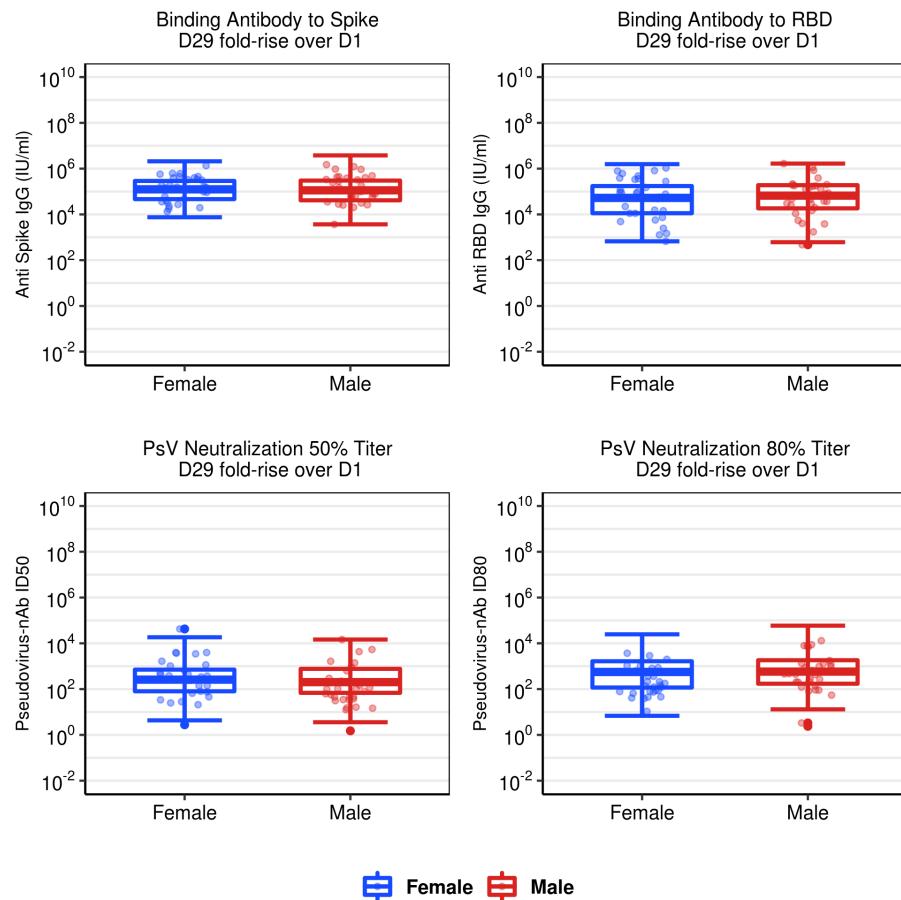


Figure 1.140: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

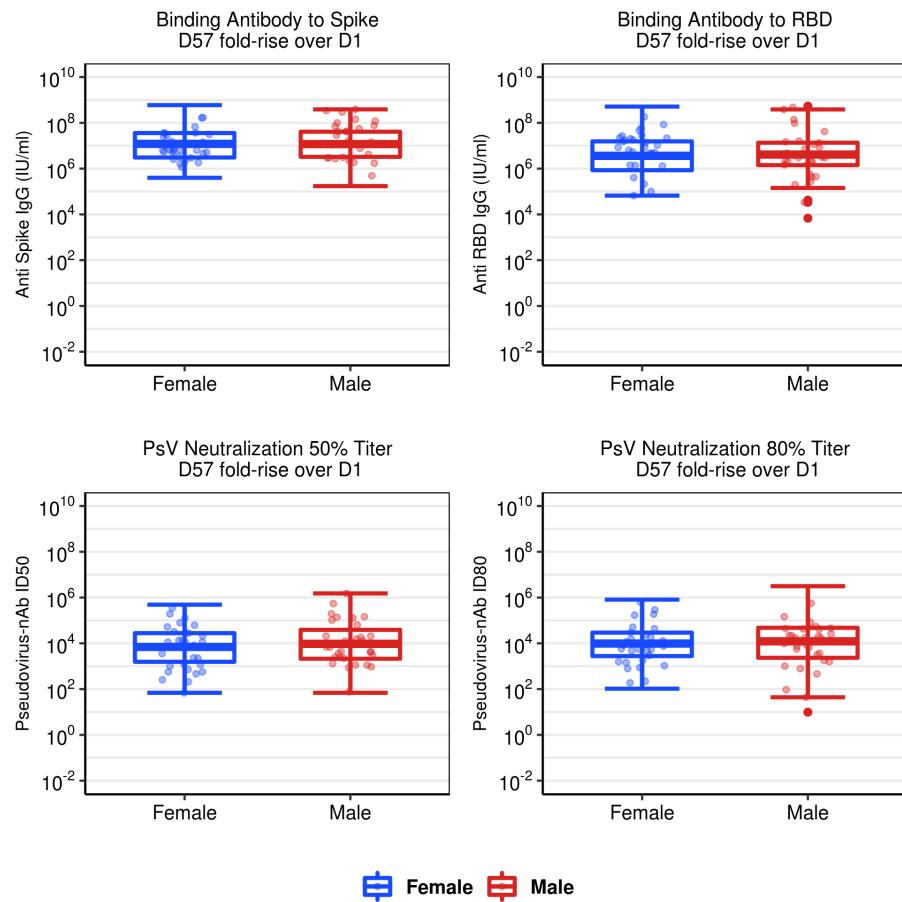


Figure 1.141: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT155

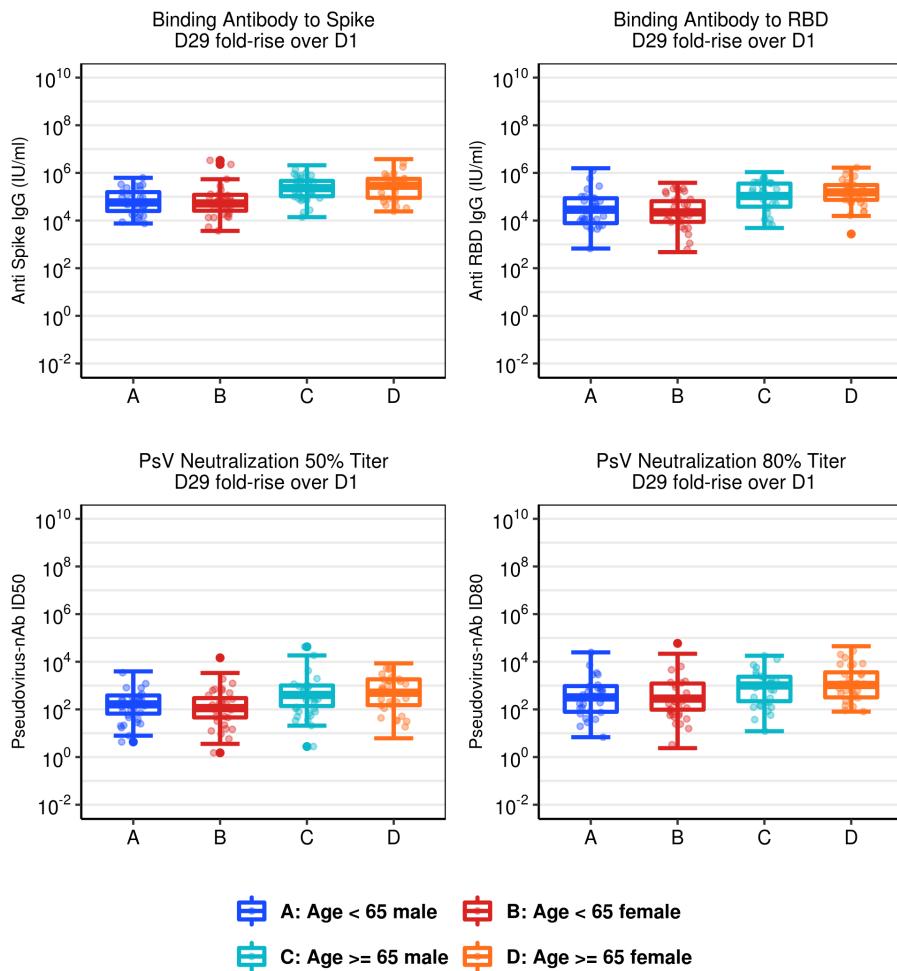


Figure 1.142: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

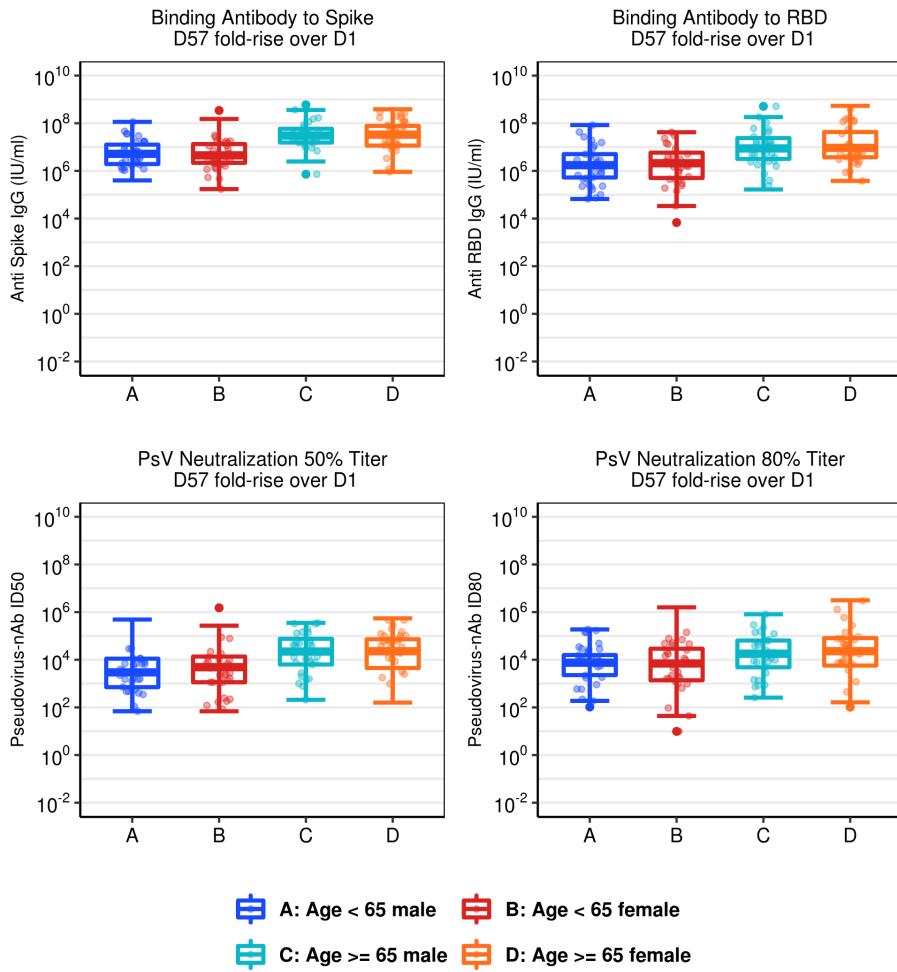


Figure 1.143: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT157

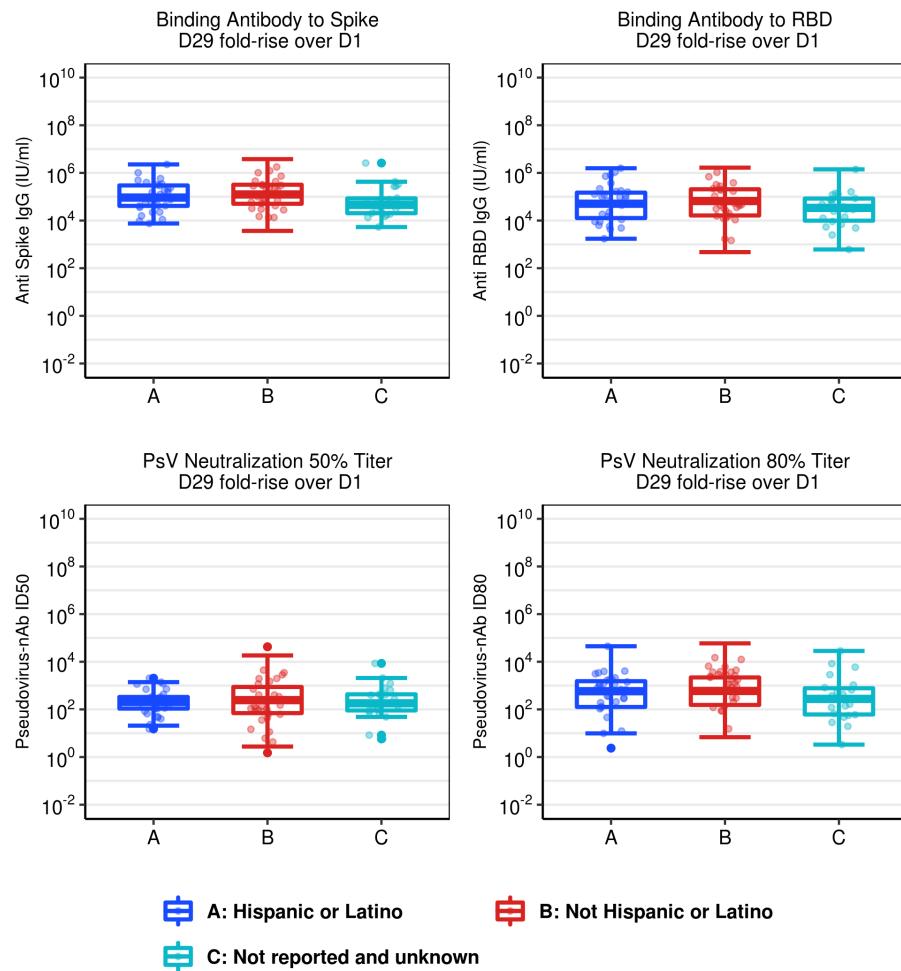


Figure 1.144: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

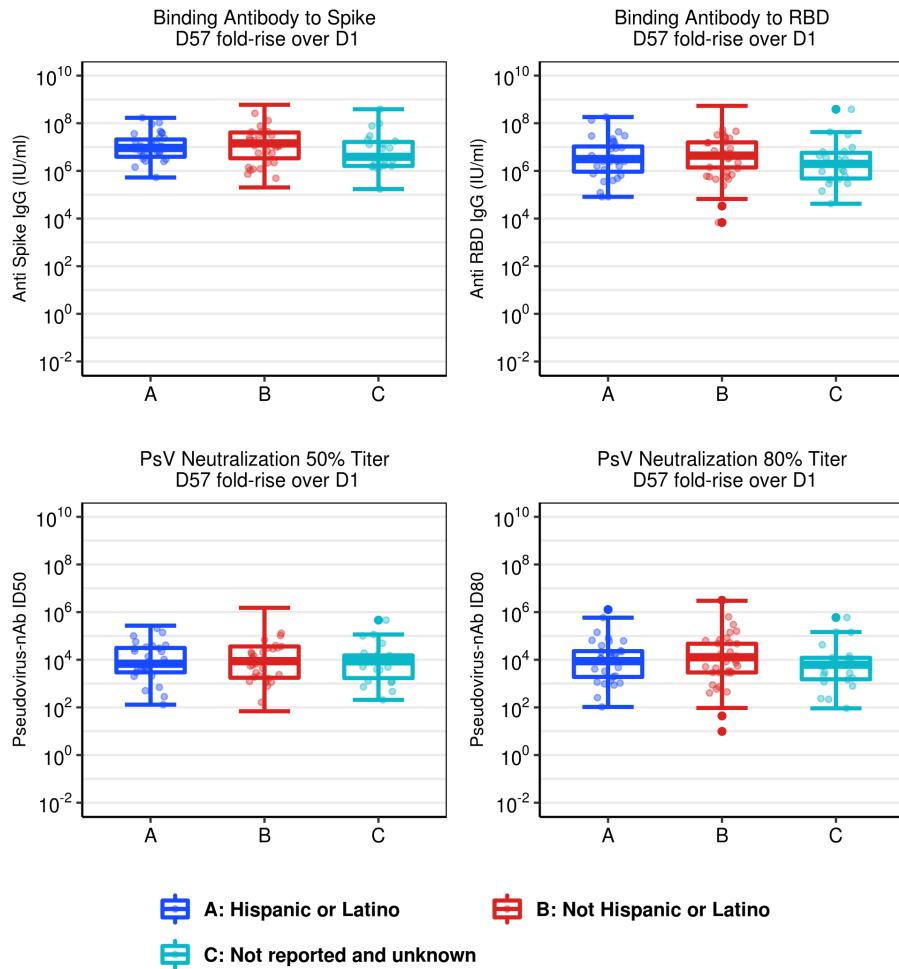


Figure 1.145: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT159

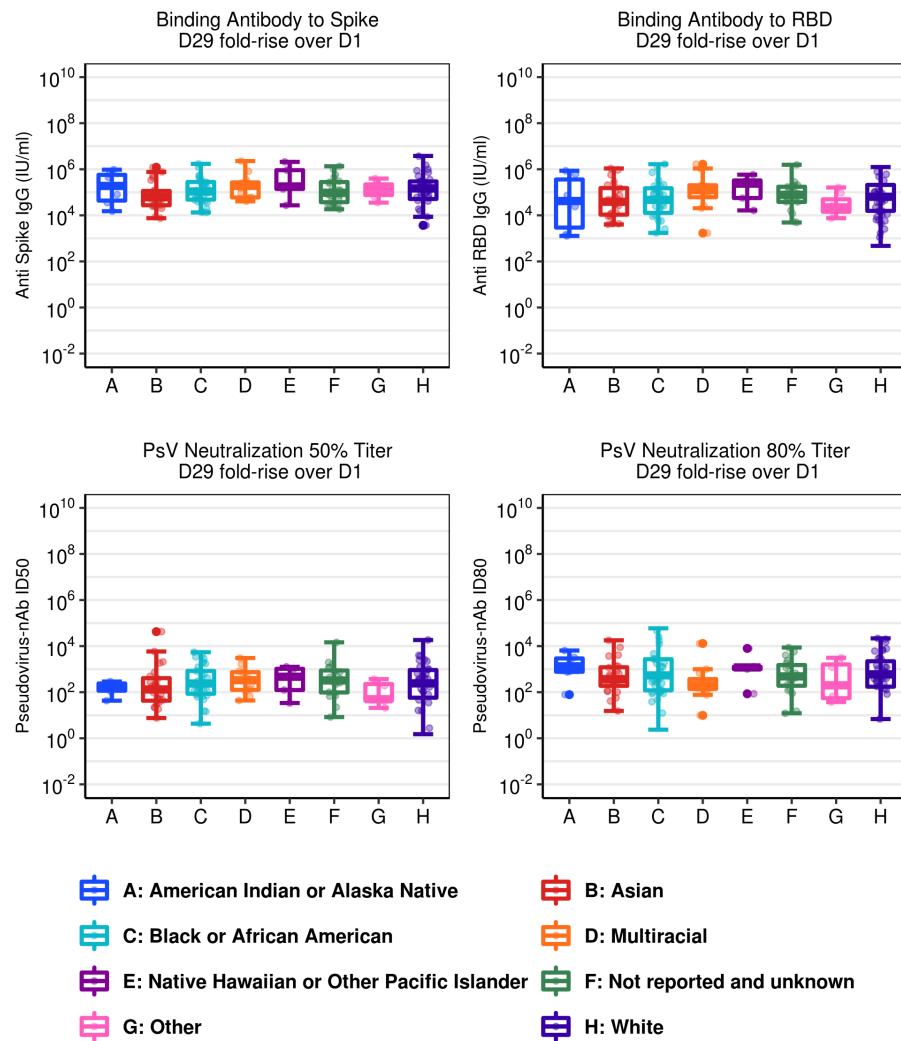


Figure 1.146: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

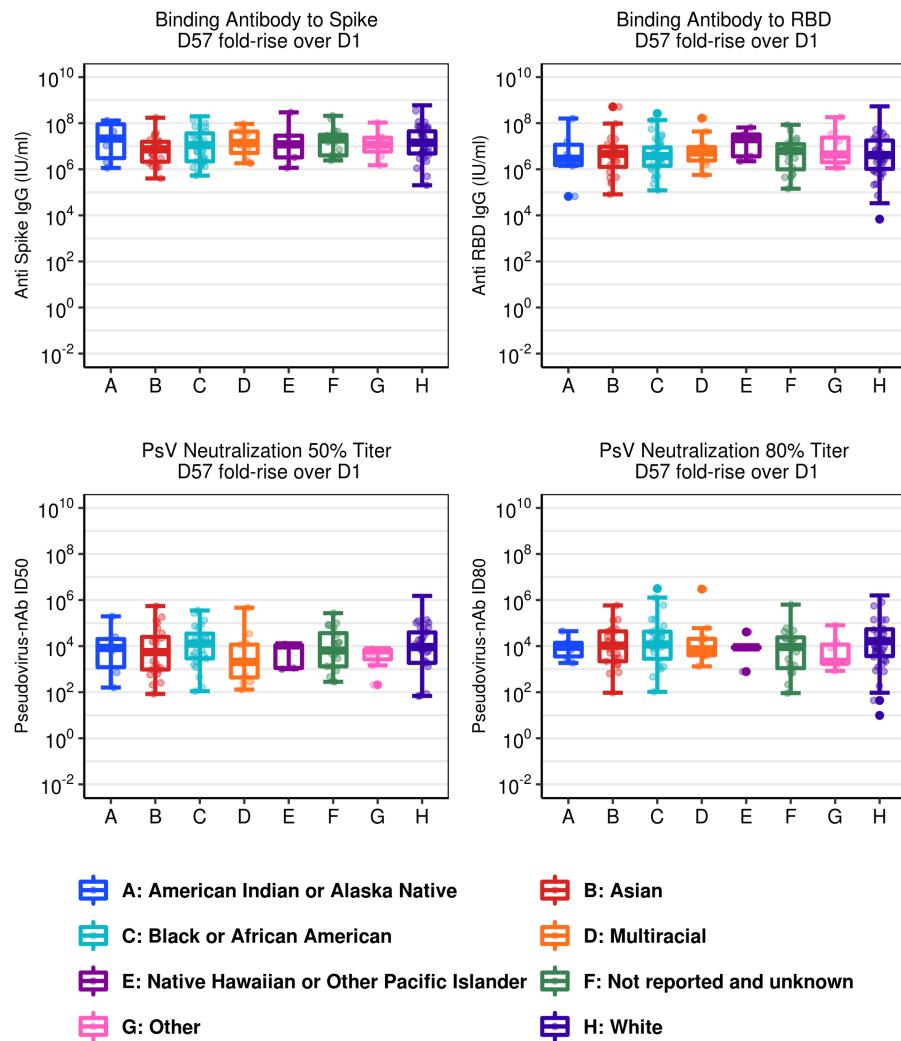


Figure 1.147: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT161

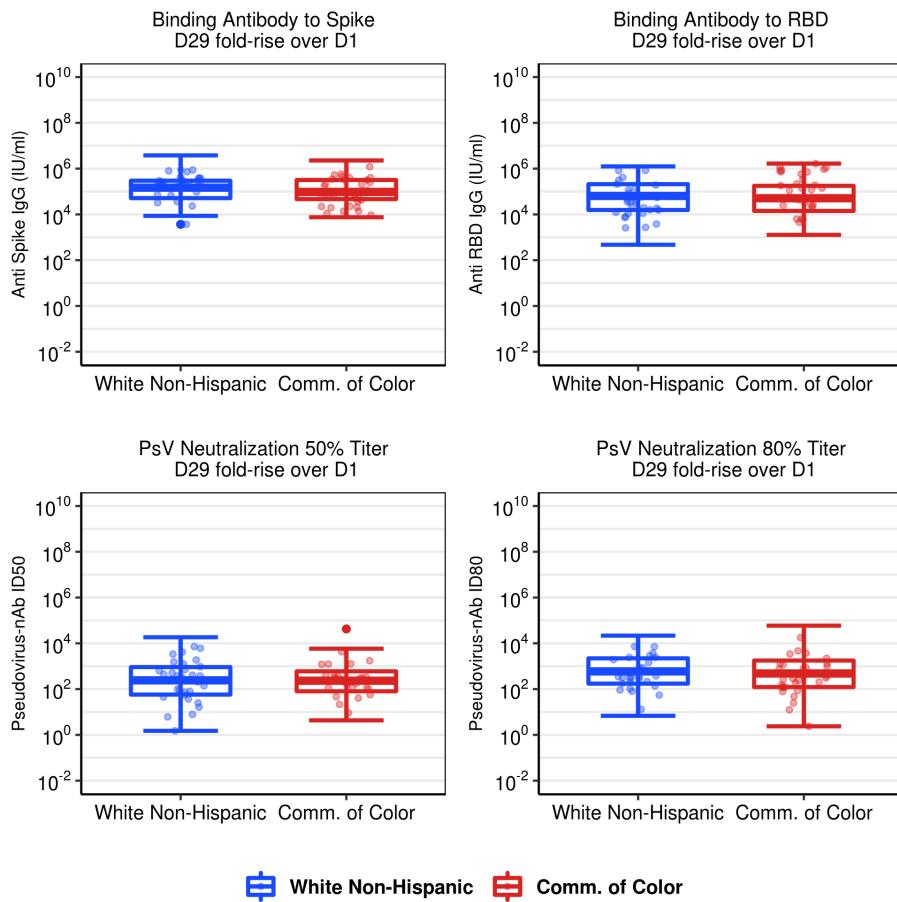


Figure 1.148: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

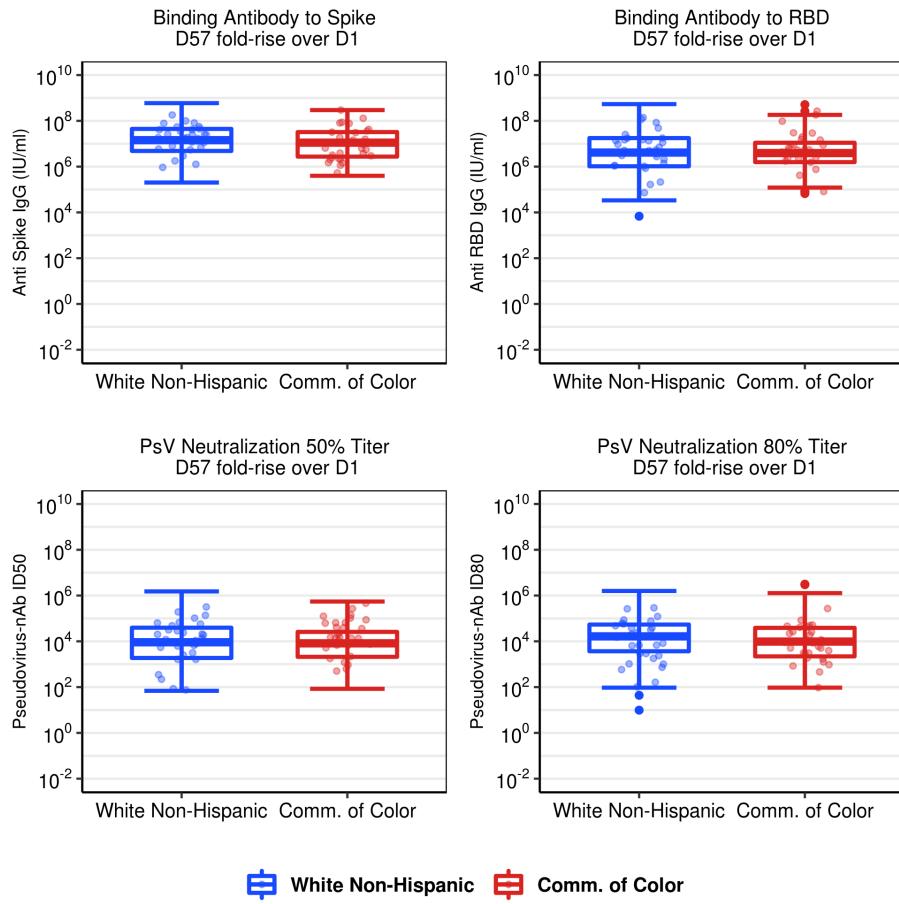


Figure 1.149: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

1.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT163

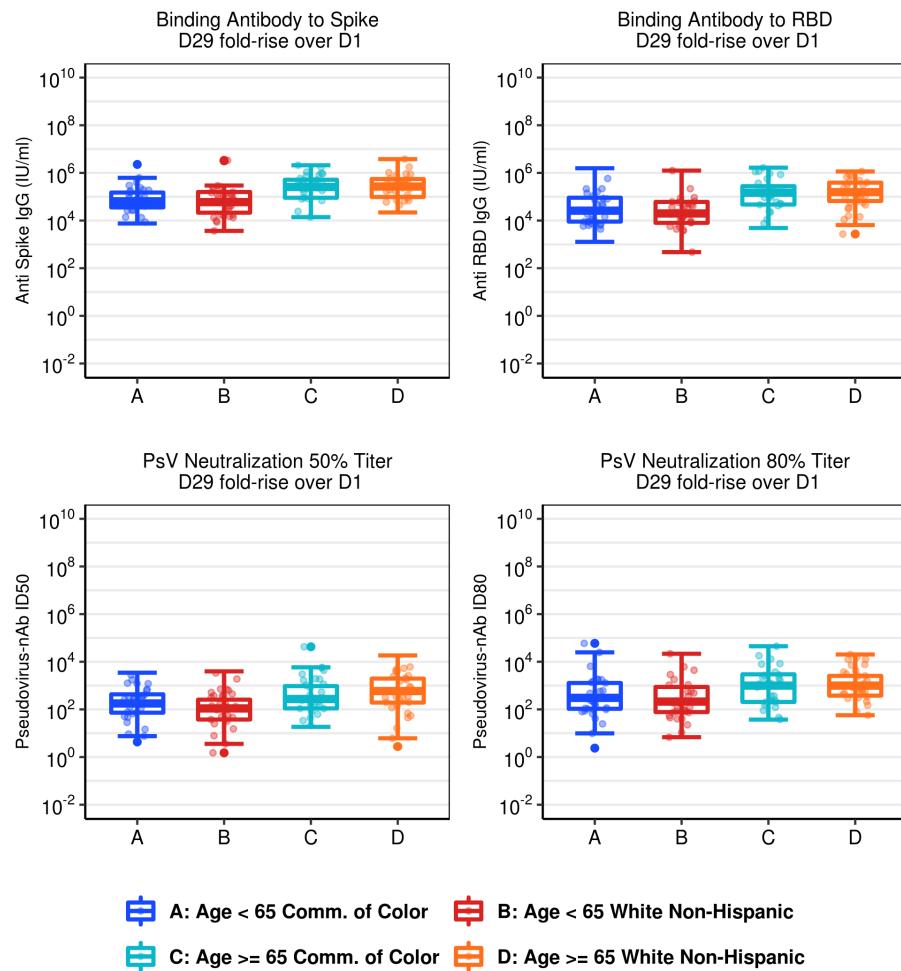


Figure 1.150: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

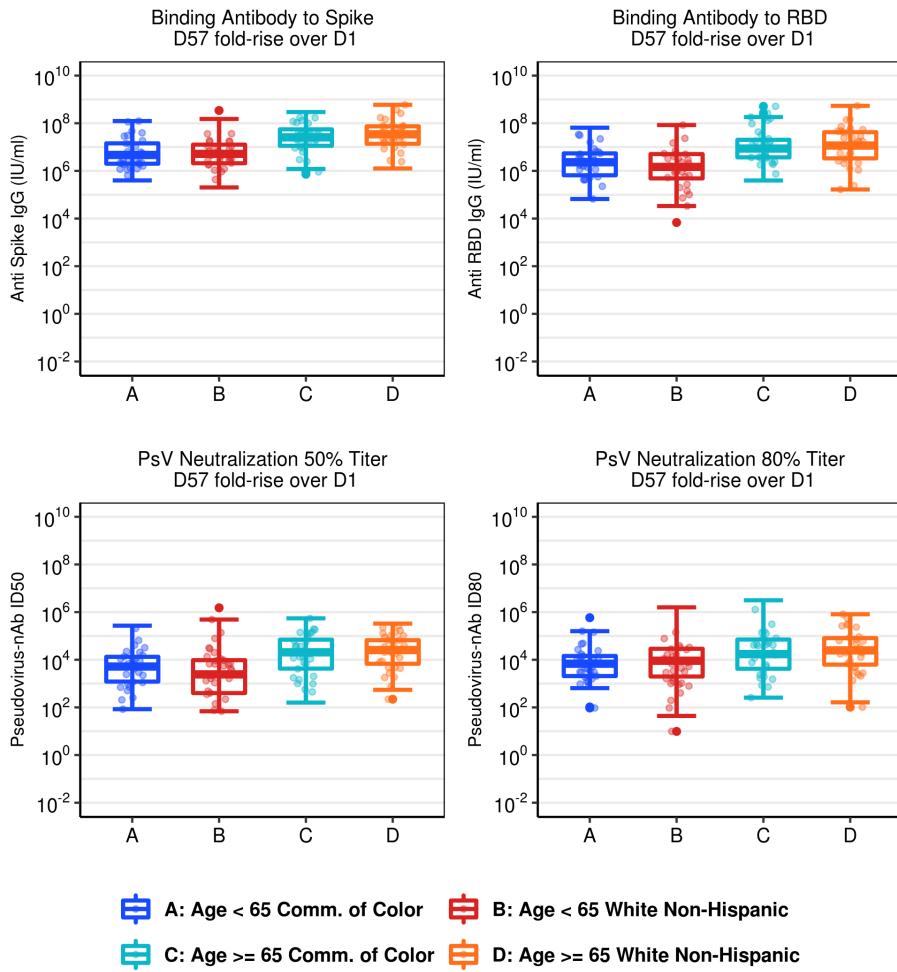


Figure 1.151: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

Chapter 2

Tabular Description of Immunogenicity Data

Table 1. Demographic and Clinical Characteristics at Baseline in the baseline SARS-CoV-2 negative per-protocol cohort

Characteristics	Vaccine (N = 914)	Placebo (N = 163)	Total (N = 1077)
Age			
Age < 65	432 (47.3%)	80 (49.1%)	512 (47.5%)
Age ≥ 65	482 (52.7%)	83 (50.9%)	565 (52.5%)
Mean (Range)	58.6 (18.0, 85.0)	59.0 (18.0, 85.0)	58.7 (18.0, 85.0)
BMI			
Mean ± SD	30.1 ± 7.0	29.6 ± 7.2	30.0 ± 7.0
Sex			
Female	519 (56.8%)	87 (53.4%)	606 (56.3%)
Male	395 (43.2%)	76 (46.6%)	471 (43.7%)
Race			
White Non-Hispanic	362 (43.8%)	67 (44.7%)	429 (43.9%)
Black or African American	195 (23.6%)	39 (26.0%)	234 (24.0%)
Asian	67 (8.1%)	12 (8.0%)	79 (8.1%)
American Indian or Alaska Native	13 (1.6%)	5 (3.3%)	18 (1.8%)
Native Hawaiian or Other Pacific Islander	17 (2.1%)	1 (0.7%)	18 (1.8%)
Multiracial	52 (6.3%)	8 (5.3%)	60 (6.1%)
Other	34 (4.1%)	4 (2.7%)	38 (3.9%)
Not reported and unknown	87 (10.5%)	14 (9.3%)	101 (10.3%)
Communities of Color	420 (53.7%)	73 (52.1%)	493 (53.5%)
Hispanic or Latino ethnicity			
Hispanic or Latino	136 (14.9%)	20 (12.3%)	156 (14.5%)

(continued)

Characteristics	Vaccine (N = 914)	Placebo (N = 163)	Total (N = 1077)
Not Hispanic or Latino	690 (75.5%)	130 (79.8%)	820 (76.1%)
Not reported and unknown	88 (9.6%)	13 (8.0%)	101 (9.4%)
Risk for Severe Covid-19			
At-risk	469 (51.3%)	84 (51.5%)	553 (51.3%)
Not at-risk	445 (48.7%)	79 (48.5%)	524 (48.7%)
Age, Risk for Severe Covid-19			
Age \geq 65	482 (52.7%)	83 (50.9%)	565 (52.5%)
Age < 65 At-risk	214 (23.4%)	40 (24.5%)	254 (23.6%)
Age < 65 Not at-risk	218 (23.9%)	40 (24.5%)	258 (24.0%)

This table summarises the random subcohort, which was randomly sampled from the per-protocol individuals without a COVID failure event < 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 2. Demographic and Clinical Characteristics at Baseline in the baseline SARS-CoV-2 positive per-protocol cohort

Characteristics	Vaccine (N = 274)	Placebo (N = 270)	Total (N = 544)
Age			
Age < 65	146 (53.3%)	147 (54.4%)	293 (53.9%)
Age ≥ 65	128 (46.7%)	123 (45.6%)	251 (46.1%)
Mean (Range)	56.0 (18.0, 85.0)	55.8 (18.0, 85.0)	55.9 (18.0, 85.0)
BMI			
Mean ± SD	30.7 ± 6.8	30.1 ± 7.2	30.4 ± 7.0
Sex			
Female	153 (55.8%)	155 (57.4%)	308 (56.6%)
Male	121 (44.2%)	115 (42.6%)	236 (43.4%)
Race			
White Non-Hispanic	125 (49.8%)	121 (49.0%)	246 (49.4%)
Black or African American	52 (20.7%)	60 (24.3%)	112 (22.5%)
Asian	24 (9.6%)	13 (5.3%)	37 (7.4%)
American Indian or Alaska Native	6 (2.4%)	4 (1.6%)	10 (2.0%)
Native Hawaiian or Other Pacific Islander	5 (2.0%)	1 (0.4%)	6 (1.2%)
Multiracial	12 (4.8%)	19 (7.7%)	31 (6.2%)
Other	7 (2.8%)	5 (2.0%)	12 (2.4%)
Not reported and unknown	20 (8.0%)	24 (9.7%)	44 (8.8%)
Communities of Color	120 (49.0%)	111 (47.8%)	231 (48.4%)
Hispanic or Latino ethnicity			
Hispanic or Latino	35 (12.8%)	38 (14.1%)	73 (13.4%)
Not Hispanic or Latino	217 (79.2%)	214 (79.3%)	431 (79.2%)
Not reported and unknown	22 (8.0%)	18 (6.7%)	40 (7.4%)
Risk for Severe Covid-19			
At-risk	125 (45.6%)	123 (45.6%)	248 (45.6%)
Not at-risk	149 (54.4%)	147 (54.4%)	296 (54.4%)
Age, Risk for Severe Covid-19			
Age ≥ 65	128 (46.7%)	123 (45.6%)	251 (46.1%)
Age < 65 At-risk	73 (26.6%)	75 (27.8%)	148 (27.2%)
Age < 65 Not at-risk	73 (26.6%)	72 (26.7%)	145 (26.7%)

This table summarises the random subcohort, which was randomly sampled from the per-protocol individuals without a COVID failure event < 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 3a. 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 SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
All participants								
	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)
	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	163	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	163	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)
	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	163	76.3/13359 = 0.6% (0.1%, 4.0%)	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	163	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 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 3b. 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 SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age								
Age < 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	80	0/10234 = 0.0% (0.0%, 0.0%)	0/10234 = 0.0% (0.0%, 0.0%)	0/10234 = 0.0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	80	0/10234 = 0.0% (0.0%, 0.0%)	0/10234 = 0.0% (0.0%, 0.0%)	0/10234 = 0.0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	147	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	147	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	80	76.3/10234 = 0.7% (0.1%, 5.3%)	0/10234 = 0.0% (0.0%, 0.0%)	0/10234 = 0.0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	80	0/10234 = 0.0% (0.0%, 0.0%)	0/10234 = 0.0% (0.0%, 0.0%)	0/10234 = 0.0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	147	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	147	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)
Age ≥ 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 ≥ 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 ≥ 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	83	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	83	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	123	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	123	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)
Age ≥ 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 ≥ 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 RBD IgG (IU/ml)	83	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	83	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	123	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	123	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 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 3c. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Risk for Severe Covid-19								
At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	84	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	84	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	123	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	123	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	84	76.3/4096.4 = 1.9% (0.2%, 12.6%)	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	84	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	123	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	123	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	79	0/9262.6 = 0.0% (0.0%, 0.0%)	0/9262.6 = 0.0% (0.0%, 0.0%)	0/9262.6 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	79	0/9262.6 = 0.0% (0.0%, 0.0%)	0/9262.6 = 0.0% (0.0%, 0.0%)	0/9262.6 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	147	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	147	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	79	0/9262.6 = 0.0% (0.0%, 0.0%)	0/9262.6 = 0.0% (0.0%, 0.0%)	0/9262.6 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	79	0/9262.6 = 0.0% (0.0%, 0.0%)	0/9262.6 = 0.0% (0.0%, 0.0%)	0/9262.6 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	147	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	147	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 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 3d. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Age, Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age, Risk for Severe Covid-19								
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	40	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	40	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	75	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	75	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	40	76.3/2454 = 3.1% (0.4%, 20.6%)	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	40	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	75	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	75	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	40	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	40	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	72	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	72	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	40	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	40	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	72	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	72	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	44	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	44	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	48	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%)
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	48	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%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	44	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	44	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	48	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%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	48	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%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	39	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	39	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	75	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	75	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	39	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	39	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	75	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	75	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 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 3e. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Sex								
Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	76	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	76	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	115	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	115	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	76	76.3/4771.7 = 1.6% (0.2%, 11.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	76	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	115	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	115	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)
Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	87	0/8587.3 = 0.0% (0.0%, 0.0%)	0/8587.3 = 0.0% (0.0%, 0.0%)	0/8587.3 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	87	0/8587.3 = 0.0% (0.0%, 0.0%)	0/8587.3 = 0.0% (0.0%, 0.0%)	0/8587.3 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	155	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)
Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	155	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	87	0/8587.3 = 0.0% (0.0%, 0.0%)	0/8587.3 = 0.0% (0.0%, 0.0%)	0/8587.3 = 0.0% (0.0%, 0.0%)
Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	87	0/8587.3 = 0.0% (0.0%, 0.0%)	0/8587.3 = 0.0% (0.0%, 0.0%)	0/8587.3 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	155	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	155	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 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 3f. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Age, sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age, sex								
Age < 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	52	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	52	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	83	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	83	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	52	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	52	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	83	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	83	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	28	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	64	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	64	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	28	76.3/3045.2 = 2.5% (0.3%, 17.6%)	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	64	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	64	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	1305/1305 = 100.0% (100.0%, 100.0%)	1305/1305 = 100.0% (100.0%, 100.0%)	1305/1305 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	1305/1305 = 100.0% (100.0%, 100.0%)	1305/1305 = 100.0% (100.0%, 100.0%)	1305/1305 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	121.5/121.5 = 100.0% (100.0%, 100.0%)	121.5/121.5 = 100.0% (100.0%, 100.0%)	121.5/121.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	121.5/121.5 = 100.0% (100.0%, 100.0%)	121.5/121.5 = 100.0% (100.0%, 100.0%)	121.5/121.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	48	0/1726.6 = 0.0% (0.0%, 0.0%)	0/1726.6 = 0.0% (0.0%, 0.0%)	0/1726.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	48	0/1726.6 = 0.0% (0.0%, 0.0%)	0/1726.6 = 0.0% (0.0%, 0.0%)	0/1726.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	51	104.4/104.4 = 100.0% (100.0%, 100.0%)	104.4/104.4 = 100.0% (100.0%, 100.0%)	104.4/104.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	51	104.4/104.4 = 100.0% (100.0%, 100.0%)	104.4/104.4 = 100.0% (100.0%, 100.0%)	104.4/104.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	1305/1305 = 100.0% (100.0%, 100.0%)	1305/1305 = 100.0% (100.0%, 100.0%)	1305/1305 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	1305/1305 = 100.0% (100.0%, 100.0%)	1305/1305 = 100.0% (100.0%, 100.0%)	1305/1305 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	121.5/121.5 = 100.0% (100.0%, 100.0%)	121.5/121.5 = 100.0% (100.0%, 100.0%)	121.5/121.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	121.5/121.5 = 100.0% (100.0%, 100.0%)	121.5/121.5 = 100.0% (100.0%, 100.0%)	121.5/121.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	48	0/1726.6 = 0.0% (0.0%, 0.0%)	0/1726.6 = 0.0% (0.0%, 0.0%)	0/1726.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	48	0/1726.6 = 0.0% (0.0%, 0.0%)	0/1726.6 = 0.0% (0.0%, 0.0%)	0/1726.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	51	104.4/104.4 = 100.0% (100.0%, 100.0%)	104.4/104.4 = 100.0% (100.0%, 100.0%)	104.4/104.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	51	104.4/104.4 = 100.0% (100.0%, 100.0%)	104.4/104.4 = 100.0% (100.0%, 100.0%)	104.4/104.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	35	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	35	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	72	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	72	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	35	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	35	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	72	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	72	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 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 3g. 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 SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Hispanic or Latino ethnicity								
Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	20	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	20	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	38	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	38	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	20	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	20	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	38	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	38	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	130	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	130	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	214	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	214	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	130	76.3/10828.8 = 0.7% (0.1%, 4.9%)	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	130	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	214	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	214	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	13	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	13	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	18	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	18	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	13	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	13	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	18	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	18	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 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 3h. 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 SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Race								
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	67	76.3/6586.8 = 1.2% (0.2%, 8.1%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	39	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Black or African American	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	39	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)
Black or African American	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	60	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	60	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	39	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	39	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Black or African American	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	60	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	60	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	24	81.1/81.1 = 100.0% (100.0%, 100.0%)	81.1/81.1 = 100.0% (100.0%, 100.0%)	81.1/81.1 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	24	81.1/81.1 = 100.0% (100.0%, 100.0%)	81.1/81.1 = 100.0% (100.0%, 100.0%)	81.1/81.1 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	12	0/609.1 = 0.0% (0.0%, 0.0%)	0/609.1 = 0.0% (0.0%, 0.0%)	0/609.1 = 0.0% (0.0%, 0.0%)
Asian	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	12	0/609.1 = 0.0% (0.0%, 0.0%)	0/609.1 = 0.0% (0.0%, 0.0%)	0/609.1 = 0.0% (0.0%, 0.0%)
Asian	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	13	48.4/48.4 = 100.0% (100.0%, 100.0%)	48.4/48.4 = 100.0% (100.0%, 100.0%)	48.4/48.4 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	13	48.4/48.4 = 100.0% (100.0%, 100.0%)	48.4/48.4 = 100.0% (100.0%, 100.0%)	48.4/48.4 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	24	81.1/81.1 = 100.0% (100.0%, 100.0%)	81.1/81.1 = 100.0% (100.0%, 100.0%)	81.1/81.1 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	24	81.1/81.1 = 100.0% (100.0%, 100.0%)	81.1/81.1 = 100.0% (100.0%, 100.0%)	81.1/81.1 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Asian	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	12	0/609.1 = 0.0% (0.0%, 0.0%)	0/609.1 = 0.0% (0.0%, 0.0%)	0/609.1 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	12	0/609.1 = 0.0% (0.0%, 0.0%)	0/609.1 = 0.0% (0.0%, 0.0%)	0/609.1 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	13	48.4/48.4 = 100.0% (100.0%, 100.0%)	48.4/48.4 = 100.0% (100.0%, 100.0%)	48.4/48.4 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	13	48.4/48.4 = 100.0% (100.0%, 100.0%)	48.4/48.4 = 100.0% (100.0%, 100.0%)	48.4/48.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	151.4/151.4 = 100.0% (100.0%, 100.0%)	151.4/151.4 = 100.0% (100.0%, 100.0%)	151.4/151.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	151.4/151.4 = 100.0% (100.0%, 100.0%)	151.4/151.4 = 100.0% (100.0%, 100.0%)	151.4/151.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	5	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	5	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	4	15.3/15.3 = 100.0%	15.3/15.3 = 100.0%	15.3/15.3 = 100.0%
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	4	15.3/15.3 = 100.0%	15.3/15.3 = 100.0%	15.3/15.3 = 100.0%
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	151.4/151.4 = 100.0% (100.0%, 100.0%)	151.4/151.4 = 100.0% (100.0%, 100.0%)	151.4/151.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	151.4/151.4 = 100.0% (100.0%, 100.0%)	151.4/151.4 = 100.0% (100.0%, 100.0%)	151.4/151.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	5	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	5	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	4	15.3/15.3 = 100.0%	15.3/15.3 = 100.0%	15.3/15.3 = 100.0%

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Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	4	15.3/15.3 = 100.0%	15.3/15.3 = 100.0%	15.3/15.3 = 100.0%
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	98.2/98.2 = 100.0% (100.0%, 100.0%)	98.2/98.2 = 100.0% (100.0%, 100.0%)	98.2/98.2 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	98.2/98.2 = 100.0% (100.0%, 100.0%)	98.2/98.2 = 100.0% (100.0%, 100.0%)	98.2/98.2 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0/28.8 = 0.0%	0/28.8 = 0.0%	0/28.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0/28.8 = 0.0%	0/28.8 = 0.0%	0/28.8 = 0.0%

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	1	2.5/2.5 = 100.0%	2.5/2.5 = 100.0%	2.5/2.5 = 100.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	1	2.5/2.5 = 100.0%	2.5/2.5 = 100.0%	2.5/2.5 = 100.0%
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	98.2/98.2 = 100.0% (100.0%, 100.0%)	98.2/98.2 = 100.0% (100.0%, 100.0%)	98.2/98.2 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	98.2/98.2 = 100.0% (100.0%, 100.0%)	98.2/98.2 = 100.0% (100.0%, 100.0%)	98.2/98.2 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0/28.8 = 0.0%	0/28.8 = 0.0%	0/28.8 = 0.0%

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0/28.8 = 0.0%	0/28.8 = 0.0%	0/28.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	1	2.5/2.5 = 100.0%	2.5/2.5 = 100.0%	2.5/2.5 = 100.0%
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	1	2.5/2.5 = 100.0%	2.5/2.5 = 100.0%	2.5/2.5 = 100.0%
Multiracial	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	498.5/498.5 = 100.0% (100.0%, 100.0%)	498.5/498.5 = 100.0% (100.0%, 100.0%)	498.5/498.5 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	498.5/498.5 = 100.0% (100.0%, 100.0%)	498.5/498.5 = 100.0% (100.0%, 100.0%)	498.5/498.5 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	8	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)
Multiracial	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	8	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)
Multiracial	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	19	61.4/61.4 = 100.0% (100.0%, 100.0%)	61.4/61.4 = 100.0% (100.0%, 100.0%)	61.4/61.4 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	19	61.4/61.4 = 100.0% (100.0%, 100.0%)	61.4/61.4 = 100.0% (100.0%, 100.0%)	61.4/61.4 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	498.5/498.5 = 100.0% (100.0%, 100.0%)	498.5/498.5 = 100.0% (100.0%, 100.0%)	498.5/498.5 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Multiracial	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	498.5/498.5 = 100.0% (100.0%, 100.0%)	498.5/498.5 = 100.0% (100.0%, 100.0%)	498.5/498.5 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	8	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	8	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	19	61.4/61.4 = 100.0% (100.0%, 100.0%)	61.4/61.4 = 100.0% (100.0%, 100.0%)	61.4/61.4 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	19	61.4/61.4 = 100.0% (100.0%, 100.0%)	61.4/61.4 = 100.0% (100.0%, 100.0%)	61.4/61.4 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	469.2/469.2 = 100.0% (100.0%, 100.0%)	469.2/469.2 = 100.0% (100.0%, 100.0%)	469.2/469.2 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	469.2/469.2 = 100.0% (100.0%, 100.0%)	469.2/469.2 = 100.0% (100.0%, 100.0%)	469.2/469.2 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	13.8/13.8 = 100.0% (100.0%, 100.0%)	13.8/13.8 = 100.0% (100.0%, 100.0%)	13.8/13.8 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	13.8/13.8 = 100.0% (100.0%, 100.0%)	13.8/13.8 = 100.0% (100.0%, 100.0%)	13.8/13.8 = 100.0% (100.0%, 100.0%)
Other	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0/232.6 = 0.0%	0/232.6 = 0.0%	0/232.6 = 0.0%
Other	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0/232.6 = 0.0%	0/232.6 = 0.0%	0/232.6 = 0.0%
Other	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	5	24.1/24.1 = 100.0% (100.0%, 100.0%)	24.1/24.1 = 100.0% (100.0%, 100.0%)	24.1/24.1 = 100.0% (100.0%, 100.0%)
Other	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	5	24.1/24.1 = 100.0% (100.0%, 100.0%)	24.1/24.1 = 100.0% (100.0%, 100.0%)	24.1/24.1 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	469.2/469.2 = 100.0% (100.0%, 100.0%)	469.2/469.2 = 100.0% (100.0%, 100.0%)	469.2/469.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Other	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	469.2/469.2 = 100.0% (100.0%, 100.0%)	469.2/469.2 = 100.0% (100.0%, 100.0%)	469.2/469.2 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	13.8/13.8 = 100.0% (100.0%, 100.0%)	13.8/13.8 = 100.0% (100.0%, 100.0%)	13.8/13.8 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	13.8/13.8 = 100.0% (100.0%, 100.0%)	13.8/13.8 = 100.0% (100.0%, 100.0%)	13.8/13.8 = 100.0% (100.0%, 100.0%)
Other	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0/232.6 = 0.0%	0/232.6 = 0.0%	0/232.6 = 0.0%
Other	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0/232.6 = 0.0%	0/232.6 = 0.0%	0/232.6 = 0.0%
Other	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	5	24.1/24.1 = 100.0% (100.0%, 100.0%)	24.1/24.1 = 100.0% (100.0%, 100.0%)	24.1/24.1 = 100.0% (100.0%, 100.0%)
Other	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	5	24.1/24.1 = 100.0% (100.0%, 100.0%)	24.1/24.1 = 100.0% (100.0%, 100.0%)	24.1/24.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	1413.2/1413.2 = 100.0% (100.0%, 100.0%)	1413.2/1413.2 = 100.0% (100.0%, 100.0%)	1413.2/1413.2 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	1413.2/1413.2 = 100.0% (100.0%, 100.0%)	1413.2/1413.2 = 100.0% (100.0%, 100.0%)	1413.2/1413.2 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	155/155 = 100.0% (100.0%, 100.0%)	155/155 = 100.0% (100.0%, 100.0%)	155/155 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	155/155 = 100.0% (100.0%, 100.0%)	155/155 = 100.0% (100.0%, 100.0%)	155/155 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	14	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	14	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	24	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	24	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	1413.2/1413.2 = 100.0% (100.0%, 100.0%)	1413.2/1413.2 = 100.0% (100.0%, 100.0%)	1413.2/1413.2 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	1413.2/1413.2 = 100.0% (100.0%, 100.0%)	1413.2/1413.2 = 100.0% (100.0%, 100.0%)	1413.2/1413.2 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	155/155 = 100.0% (100.0%, 100.0%)	155/155 = 100.0% (100.0%, 100.0%)	155/155 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	155/155 = 100.0% (100.0%, 100.0%)	155/155 = 100.0% (100.0%, 100.0%)	155/155 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	14	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	14	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	24	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	24	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 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 3i. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Underrepresented minority status								
Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	73	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	73	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	111	439/439 = 100.0% (100.0%, 100.0%)	439/439 = 100.0% (100.0%, 100.0%)	439/439 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	111	439/439 = 100.0% (100.0%, 100.0%)	439/439 = 100.0% (100.0%, 100.0%)	439/439 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	73	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	73	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	111	439/439 = 100.0% (100.0%, 100.0%)	439/439 = 100.0% (100.0%, 100.0%)	439/439 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	111	439/439 = 100.0% (100.0%, 100.0%)	439/439 = 100.0% (100.0%, 100.0%)	439/439 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	67	76.3/6586.8 = 1.2% (0.2%, 8.1%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 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 3j. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Age, Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age, Underrepresented minority status								
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	37	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	37	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	37	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	37	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	61	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	61	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	31	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	31	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	517.6/517.6 = 100.0% (100.0%, 100.0%)	517.6/517.6 = 100.0% (100.0%, 100.0%)	517.6/517.6 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	517.6/517.6 = 100.0% (100.0%, 100.0%)	517.6/517.6 = 100.0% (100.0%, 100.0%)	517.6/517.6 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	31	76.3/4988.2 = 1.5% (0.2%, 11.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	31	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	61	517.6/517.6 = 100.0% (100.0%, 100.0%)	517.6/517.6 = 100.0% (100.0%, 100.0%)	517.6/517.6 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	61	517.6/517.6 = 100.0% (100.0%, 100.0%)	517.6/517.6 = 100.0% (100.0%, 100.0%)	517.6/517.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	903/903 = 100.0% (100.0%, 100.0%)	903/903 = 100.0% (100.0%, 100.0%)	903/903 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	903/903 = 100.0% (100.0%, 100.0%)	903/903 = 100.0% (100.0%, 100.0%)	903/903 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	87/87 = 100.0% (100.0%, 100.0%)	87/87 = 100.0% (100.0%, 100.0%)	87/87 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	87/87 = 100.0% (100.0%, 100.0%)	87/87 = 100.0% (100.0%, 100.0%)	87/87 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	36	0/1038 = 0.0% (0.0%, 0.0%)	0/1038 = 0.0% (0.0%, 0.0%)	0/1038 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	36	0/1038 = 0.0% (0.0%, 0.0%)	0/1038 = 0.0% (0.0%, 0.0%)	0/1038 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	50	78/78 = 100.0% (100.0%, 100.0%)	78/78 = 100.0% (100.0%, 100.0%)	78/78 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	50	78/78 = 100.0% (100.0%, 100.0%)	78/78 = 100.0% (100.0%, 100.0%)	78/78 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	903/903 = 100.0% (100.0%, 100.0%)	903/903 = 100.0% (100.0%, 100.0%)	903/903 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	903/903 = 100.0% (100.0%, 100.0%)	903/903 = 100.0% (100.0%, 100.0%)	903/903 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	87/87 = 100.0% (100.0%, 100.0%)	87/87 = 100.0% (100.0%, 100.0%)	87/87 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	87/87 = 100.0% (100.0%, 100.0%)	87/87 = 100.0% (100.0%, 100.0%)	87/87 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	36	0/1038 = 0.0% (0.0%, 0.0%)	0/1038 = 0.0% (0.0%, 0.0%)	0/1038 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	36	0/1038 = 0.0% (0.0%, 0.0%)	0/1038 = 0.0% (0.0%, 0.0%)	0/1038 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	50	78/78 = 100.0% (100.0%, 100.0%)	78/78 = 100.0% (100.0%, 100.0%)	78/78 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	50	78/78 = 100.0% (100.0%, 100.0%)	78/78 = 100.0% (100.0%, 100.0%)	78/78 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	1379.7/1379.7 = 100.0% (100.0%, 100.0%)	1379.7/1379.7 = 100.0% (100.0%, 100.0%)	1379.7/1379.7 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	1379.7/1379.7 = 100.0% (100.0%, 100.0%)	1379.7/1379.7 = 100.0% (100.0%, 100.0%)	1379.7/1379.7 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	171.4/171.4 = 100.0% (100.0%, 100.0%)	171.4/171.4 = 100.0% (100.0%, 100.0%)	171.4/171.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	171.4/171.4 = 100.0% (100.0%, 100.0%)	171.4/171.4 = 100.0% (100.0%, 100.0%)	171.4/171.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	36	0/1598.6 = 0.0% (0.0%, 0.0%)	0/1598.6 = 0.0% (0.0%, 0.0%)	0/1598.6 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	36	0/1598.6 = 0.0% (0.0%, 0.0%)	0/1598.6 = 0.0% (0.0%, 0.0%)	0/1598.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	60	148.8/148.8 = 100.0% (100.0%, 100.0%)	148.8/148.8 = 100.0% (100.0%, 100.0%)	148.8/148.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	60	148.8/148.8 = 100.0% (100.0%, 100.0%)	148.8/148.8 = 100.0% (100.0%, 100.0%)	148.8/148.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	1379.7/1379.7 = 100.0% (100.0%, 100.0%)	1379.7/1379.7 = 100.0% (100.0%, 100.0%)	1379.7/1379.7 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	1379.7/1379.7 = 100.0% (100.0%, 100.0%)	1379.7/1379.7 = 100.0% (100.0%, 100.0%)	1379.7/1379.7 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	171.4/171.4 = 100.0% (100.0%, 100.0%)	171.4/171.4 = 100.0% (100.0%, 100.0%)	171.4/171.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	171.4/171.4 = 100.0% (100.0%, 100.0%)	171.4/171.4 = 100.0% (100.0%, 100.0%)	171.4/171.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	36	0/1598.6 = 0.0% (0.0%, 0.0%)	0/1598.6 = 0.0% (0.0%, 0.0%)	0/1598.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	36	0/1598.6 = 0.0% (0.0%, 0.0%)	0/1598.6 = 0.0% (0.0%, 0.0%)	0/1598.6 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	60	148.8/148.8 = 100.0% (100.0%, 100.0%)	148.8/148.8 = 100.0% (100.0%, 100.0%)	148.8/148.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	60	148.8/148.8 = 100.0% (100.0%, 100.0%)	148.8/148.8 = 100.0% (100.0%, 100.0%)	148.8/148.8 = 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 4a. 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 SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
All participants								
	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	914	11733.1/13295 = 88.3% (84.7%, 91.0%)	11787.2/13295 = 88.7% (85.2%, 91.4%)	10870.9/13295 = 81.8% (77.9%, 85.1%)
	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	274	1383.1/1432 = 96.6% (91.6%, 98.7%)	1383.1/1432 = 96.6% (91.6%, 98.7%)	1287.8/1432 = 89.9% (83.3%, 94.1%)
	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	163	149.5/13359 = 1.1% (0.3%, 3.8%)	149.5/13359 = 1.1% (0.3%, 3.8%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	270	1139.8/1357 = 84.0% (76.8%, 89.3%)	1143.2/1357 = 84.2% (77.0%, 89.5%)	906/1357 = 66.8% (58.6%, 74.0%)
	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	914	13159.4/13295 = 99.0% (98.0%, 99.5%)	13159.4/13295 = 99.0% (98.0%, 99.5%)	12955/13295 = 97.4% (95.6%, 98.5%)
	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	274	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	163	131.9/13359 = 1.0% (0.3%, 3.0%)	131.9/13359 = 1.0% (0.3%, 3.0%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	270	1301.8/1357 = 95.9% (90.6%, 98.3%)	1301.8/1357 = 95.9% (90.6%, 98.3%)	1253.1/1357 = 92.3% (86.0%, 95.9%)

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 4b. 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 SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age								
Age < 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	432	9050.2/10518 = 86.0% (81.6%, 89.5%)	9096.9/10518 = 86.5% (82.1%, 89.9%)	8317.2/10518 = 79.1% (74.2%, 83.2%)
Age < 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	146	1103/1145 = 96.3% (89.7%, 98.7%)	1103/1145 = 96.3% (89.7%, 98.7%)	1010.3/1145 = 88.2% (80.0%, 93.4%)
Age < 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	80	76.3/10234 = 0.7% (0.1%, 5.3%)	76.3/10234 = 0.7% (0.1%, 5.3%)	0/10234 = 0.0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	147	896.3/1098 = 81.6% (72.7%, 88.1%)	899.7/1098 = 81.9% (73.1%, 88.4%)	682.7/1098 = 62.2% (52.3%, 71.1%)
Age < 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	432	10405/10518 = 98.9% (97.6%, 99.5%)	10405/10518 = 98.9% (97.6%, 99.5%)	10226.7/10518 = 97.2% (94.8%, 98.5%)
Age < 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	146	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	80	43.1/10234 = 0.4% (0.1%, 3.0%)	43.1/10234 = 0.4% (0.1%, 3.0%)	0/10234 = 0.0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	147	1042.8/1098 = 95.0% (88.4%, 97.9%)	1042.8/1098 = 95.0% (88.4%, 97.9%)	995.7/1098 = 90.7% (82.9%, 95.1%)
Age ≥ 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	482	2682.9/2777 = 96.6% (94.4%, 98.0%)	2690.3/2777 = 96.9% (94.8%, 98.2%)	2553.6/2777 = 92.0% (89.1%, 94.1%)
Age ≥ 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	128	280.1/287 = 97.6% (92.6%, 99.3%)	280.1/287 = 97.6% (92.6%, 99.3%)	277.5/287 = 96.7% (91.3%, 98.8%)
Age ≥ 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	83	73.2/3125 = 2.3% (0.5%, 9.5%)	73.2/3125 = 2.3% (0.5%, 9.5%)	0/3125 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	123	243.5/259 = 94.0% (87.7%, 97.2%)	243.5/259 = 94.0% (87.7%, 97.2%)	223.3/259 = 86.2% (78.6%, 91.4%)
Age ≥ 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	482	2754.3/2777 = 99.2% (97.7%, 99.7%)	2754.3/2777 = 99.2% (97.7%, 99.7%)	2728.2/2777 = 98.2% (96.4%, 99.1%)
Age ≥ 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 ≥ 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	83	88.8/3125 = 2.8% (0.7%, 10.9%)	88.8/3125 = 2.8% (0.7%, 10.9%)	0/3125 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	123	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)	257.4/259 = 99.4% (95.7%, 99.9%)

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 4c. 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 SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Risk for Severe Covid-19								
At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	469	3353.3/3736.6 = 89.7% (86.3%, 92.4%)	3360.6/3736.6 = 89.9% (86.6%, 92.5%)	3035.3/3736.6 = 81.2% (77.1%, 84.8%)
At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	125	355.1/368.8 = 96.3% (90.0%, 98.7%)	355.1/368.8 = 96.3% (90.0%, 98.7%)	332.9/368.8 = 90.3% (82.5%, 94.8%)
At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	84	149.5/4096.4 = 3.6% (1.0%, 12.0%)	149.5/4096.4 = 3.6% (1.0%, 12.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	123	284.5/331.2 = 85.9% (78.4%, 91.1%)	287.9/331.2 = 86.9% (79.6%, 91.9%)	248.5/331.2 = 75.0% (66.5%, 82.0%)
At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	469	3654.9/3736.6 = 97.8% (95.6%, 98.9%)	3654.9/3736.6 = 97.8% (95.6%, 98.9%)	3597.8/3736.6 = 96.3% (93.7%, 97.8%)
At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	125	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	84	43.1/4096.4 = 1.1% (0.1%, 7.4%)	43.1/4096.4 = 1.1% (0.1%, 7.4%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	123	322.9/331.2 = 97.5% (92.2%, 99.2%)	322.9/331.2 = 97.5% (92.2%, 99.2%)	317/331.2 = 95.7% (89.9%, 98.2%)
Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	445	8379.9/9558.4 = 87.7% (82.8%, 91.3%)	8426.5/9558.4 = 88.2% (83.4%, 91.7%)	7835.6/9558.4 = 82.0% (76.7%, 86.3%)
Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	149	1028/1063.2 = 96.7% (89.2%, 99.0%)	1028/1063.2 = 96.7% (89.2%, 99.0%)	954.9/1063.2 = 89.8% (80.7%, 94.9%)
Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	79	0/9262.6 = 0.0% (0.0%, 0.0%)	0/9262.6 = 0.0% (0.0%, 0.0%)	0/9262.6 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	147	855.3/1025.8 = 83.4% (73.8%, 89.9%)	855.3/1025.8 = 83.4% (73.8%, 89.9%)	657.5/1025.8 = 64.1% (53.6%, 73.4%)
Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	445	9504.5/9558.4 = 99.4% (97.8%, 99.9%)	9504.5/9558.4 = 99.4% (97.8%, 99.9%)	9357.2/9558.4 = 97.9% (95.0%, 99.1%)
Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	149	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	79	88.8/9262.6 = 1.0% (0.2%, 3.7%)	88.8/9262.6 = 1.0% (0.2%, 3.7%)	0/9262.6 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	147	978.9/1025.8 = 95.4% (88.1%, 98.3%)	978.9/1025.8 = 95.4% (88.1%, 98.3%)	936.2/1025.8 = 91.3% (82.8%, 95.8%)

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 ID50 pseudo-virus neutralization antibody markers by Age, Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	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	214	1967.1/2279 = 86.3% (81.1%, 90.3%)	1967.1/2279 = 86.3% (81.1%, 90.3%)	1729.6/2279 = 75.9% (69.6%, 81.2%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	73	236.9/248 = 95.5% (86.2%, 98.7%)	236.9/248 = 95.5% (86.2%, 98.7%)	214.7/248 = 86.6% (75.4%, 93.1%)
Age < 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	40	76.3/2454 = 3.1% (0.4%, 20.6%)	76.3/2454 = 3.1% (0.4%, 20.6%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	75	186.7/226 = 82.6% (72.4%, 89.6%)	190.1/226 = 84.1% (74.3%, 90.7%)	160.7/226 = 71.1% (59.9%, 80.2%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	214	2219.9/2279 = 97.4% (93.8%, 98.9%)	2219.9/2279 = 97.4% (93.8%, 98.9%)	2181.6/2279 = 95.7% (91.6%, 97.9%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	73	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	40	43.1/2454 = 1.8% (0.2%, 12.3%)	43.1/2454 = 1.8% (0.2%, 12.3%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	75	217.6/226 = 96.3% (88.7%, 98.9%)	217.6/226 = 96.3% (88.7%, 98.9%)	211.8/226 = 93.7% (85.3%, 97.4%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	218	7083.2/8239 = 86.0% (80.3%, 90.2%)	7129.8/8239 = 86.5% (81.0%, 90.7%)	6587.7/8239 = 80.0% (73.8%, 85.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	73	866.1/897 = 96.6% (86.9%, 99.2%)	866.1/897 = 96.6% (86.9%, 99.2%)	795.6/897 = 88.7% (77.8%, 94.6%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	40	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	72	709.6/872 = 81.4% (70.1%, 89.1%)	709.6/872 = 81.4% (70.1%, 89.1%)	522.1/872 = 59.9% (47.7%, 70.9%)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	218	8185.1/8239 = 99.3% (97.4%, 99.8%)	8185.1/8239 = 99.3% (97.4%, 99.8%)	8045.2/8239 = 97.6% (94.3%, 99.1%)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	73	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	40	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	72	825.1/872 = 94.6% (86.0%, 98.1%)	825.1/872 = 94.6% (86.0%, 98.1%)	783.9/872 = 89.9% (79.8%, 95.2%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	255	1386.2/1457.6 = 95.1% (91.4%, 97.3%)	1393.5/1457.6 = 95.6% (92.0%, 97.6%)	1305.7/1457.6 = 89.6% (85.0%, 92.9%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	52	118.2/120.8 = 97.8% (85.4%, 99.7%)	118.2/120.8 = 97.8% (85.4%, 99.7%)	118.2/120.8 = 97.8% (85.4%, 99.7%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	44	73.2/1642.4 = 4.5% (1.0%, 17.7%)	73.2/1642.4 = 4.5% (1.0%, 17.7%)	0/1642.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	48	97.8/105.2 = 92.9% (79.7%, 97.8%)	97.8/105.2 = 92.9% (79.7%, 97.8%)	87.9/105.2 = 83.5% (69.0%, 92.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	255	1434.9/1457.6 = 98.4% (95.7%, 99.4%)	1434.9/1457.6 = 98.4% (95.7%, 99.4%)	1416.2/1457.6 = 97.2% (94.0%, 98.7%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	52	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	44	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	48	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%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	227	1296.7/1319.4 = 98.3% (95.3%, 99.4%)	1296.7/1319.4 = 98.3% (95.3%, 99.4%)	1247.9/1319.4 = 94.6% (90.5%, 97.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	76	161.9/166.2 = 97.4% (89.6%, 99.4%)	161.9/166.2 = 97.4% (89.6%, 99.4%)	159.3/166.2 = 95.8% (87.3%, 98.7%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	39	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	75	145.7/153.8 = 94.7% (86.2%, 98.1%)	145.7/153.8 = 94.7% (86.2%, 98.1%)	135.4/153.8 = 88.1% (78.7%, 93.6%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	227	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1312/1319.4 = 99.4% (96.1%, 99.9%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	76	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	39	88.8/1482.6 = 6.0% (1.4%, 22.0%)	88.8/1482.6 = 6.0% (1.4%, 22.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	75	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)	152.2/153.8 = 99.0% (92.9%, 99.9%)

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 4e. 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 SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Sex								
Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	395	4737.9/5298.6 = 89.4% (83.8%, 93.2%)	4745.3/5298.6 = 89.6% (83.9%, 93.4%)	4439.5/5298.6 = 83.8% (77.6%, 88.5%)
Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	121	557.7/564.7 = 98.8% (94.9%, 99.7%)	557.7/564.7 = 98.8% (94.9%, 99.7%)	522.3/564.7 = 92.5% (83.1%, 96.9%)
Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	76	105.1/4771.7 = 2.2% (0.5%, 9.9%)	105.1/4771.7 = 2.2% (0.5%, 9.9%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	115	433.2/529.2 = 81.9% (69.1%, 90.1%)	433.2/529.2 = 81.9% (69.1%, 90.1%)	328.3/529.2 = 62.0% (49.2%, 73.4%)
Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	395	5254.4/5298.6 = 99.2% (97.9%, 99.7%)	5254.4/5298.6 = 99.2% (97.9%, 99.7%)	5101.6/5298.6 = 96.3% (91.7%, 98.4%)
Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	121	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	76	44.4/4771.7 = 0.9% (0.1%, 6.6%)	44.4/4771.7 = 0.9% (0.1%, 6.6%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	115	517/529.2 = 97.7% (88.9%, 99.6%)	517/529.2 = 97.7% (88.9%, 99.6%)	483.7/529.2 = 91.4% (79.2%, 96.7%)
Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	519	6995.2/7996.4 = 87.5% (82.6%, 91.1%)	7041.9/7996.4 = 88.1% (83.3%, 91.6%)	6431.3/7996.4 = 80.4% (75.1%, 84.8%)
Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	153	825.4/867.3 = 95.2% (86.7%, 98.3%)	825.4/867.3 = 95.2% (86.7%, 98.3%)	765.4/867.3 = 88.3% (78.1%, 94.1%)
Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	87	44.4/8587.3 = 0.5% (0.1%, 3.7%)	44.4/8587.3 = 0.5% (0.1%, 3.7%)	0/8587.3 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	155	706.6/827.8 = 85.4% (75.6%, 91.7%)	710/827.8 = 85.8% (76.0%, 92.0%)	577.7/827.8 = 69.8% (58.8%, 78.9%)
Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	519	7905/7996.4 = 98.9% (97.2%, 99.5%)	7905/7996.4 = 98.9% (97.2%, 99.5%)	7853.4/7996.4 = 98.2% (96.6%, 99.1%)
Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	153	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	87	87.5/8587.3 = 1.0% (0.2%, 4.1%)	87.5/8587.3 = 1.0% (0.2%, 4.1%)	0/8587.3 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	155	784.7/827.8 = 94.8% (86.4%, 98.1%)	784.7/827.8 = 94.8% (86.4%, 98.1%)	769.4/827.8 = 93.0% (84.0%, 97.1%)

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 4f. 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 SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age, sex								
Age < 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	269	5560.6/6524.4 = 85.2% (79.3%, 89.7%)	5607.3/6524.4 = 85.9% (80.1%, 90.3%)	5076.7/6524.4 = 77.8% (71.3%, 83.2%)
Age < 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	79	664.2/701.8 = 94.6% (83.7%, 98.4%)	664.2/701.8 = 94.6% (83.7%, 98.4%)	606.9/701.8 = 86.5% (73.8%, 93.5%)
Age < 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	52	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	83	561/673.1 = 83.3% (71.3%, 91.0%)	564.4/673.1 = 83.8% (71.8%, 91.4%)	437.7/673.1 = 65.0% (51.8%, 76.3%)
Age < 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	269	6437/6524.4 = 98.7% (96.5%, 99.5%)	6437/6524.4 = 98.7% (96.5%, 99.5%)	6411.4/6524.4 = 98.3% (96.2%, 99.2%)
Age < 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	79	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	52	43.1/7188.8 = 0.6% (0.1%, 4.4%)	43.1/7188.8 = 0.6% (0.1%, 4.4%)	0/7188.8 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	83	630.1/673.1 = 93.6% (83.3%, 97.7%)	630.1/673.1 = 93.6% (83.3%, 97.7%)	616.4/673.1 = 91.6% (80.5%, 96.6%)
Age < 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	163	3489.6/3993.6 = 87.4% (79.9%, 92.3%)	3489.6/3993.6 = 87.4% (79.9%, 92.3%)	3240.5/3993.6 = 81.1% (73.0%, 87.2%)
Age < 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	67	438.8/443.2 = 99.0% (93.0%, 99.9%)	438.8/443.2 = 99.0% (93.0%, 99.9%)	403.4/443.2 = 91.0% (79.0%, 96.5%)
Age < 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	28	76.3/3045.2 = 2.5% (0.3%, 17.6%)	76.3/3045.2 = 2.5% (0.3%, 17.6%)	0/3045.2 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	64	335.3/424.9 = 78.9% (63.2%, 89.1%)	335.3/424.9 = 78.9% (63.2%, 89.1%)	245/424.9 = 57.7% (42.2%, 71.8%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	163	3968.1/3993.6 = 99.4% (97.5%, 99.8%)	3968.1/3993.6 = 99.4% (97.5%, 99.8%)	3815.3/3993.6 = 95.5% (89.2%, 98.2%)
Age < 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	67	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	28	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	64	412.7/424.9 = 97.1% (86.1%, 99.5%)	412.7/424.9 = 97.1% (86.1%, 99.5%)	379.3/424.9 = 89.3% (74.3%, 96.0%)
Age ≥ 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	232	1248.3/1305 = 95.7% (91.9%, 97.7%)	1255.7/1305 = 96.2% (92.6%, 98.1%)	1199/1305 = 91.9% (87.3%, 94.9%)
Age ≥ 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	54	118.9/121.5 = 97.9% (85.5%, 99.7%)	118.9/121.5 = 97.9% (85.5%, 99.7%)	118.9/121.5 = 97.9% (85.5%, 99.7%)
Age ≥ 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	48	28.8/1726.6 = 1.7% (0.2%, 11.6%)	28.8/1726.6 = 1.7% (0.2%, 11.6%)	0/1726.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	51	97.9/104.4 = 93.8% (81.3%, 98.1%)	97.9/104.4 = 93.8% (81.3%, 98.1%)	83.3/104.4 = 79.8% (65.3%, 89.2%)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	232	1286.3/1305 = 98.6% (95.4%, 99.6%)	1286.3/1305 = 98.6% (95.4%, 99.6%)	1286.3/1305 = 98.6% (95.4%, 99.6%)
Age ≥ 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	54	121.5/121.5 = 100.0% (100.0%, 100.0%)	121.5/121.5 = 100.0% (100.0%, 100.0%)	121.5/121.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	48	44.4/1726.6 = 2.6% (0.3%, 17.2%)	44.4/1726.6 = 2.6% (0.3%, 17.2%)	0/1726.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	51	104.4/104.4 = 100.0% (100.0%, 100.0%)	104.4/104.4 = 100.0% (100.0%, 100.0%)	104.4/104.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	250	1434.6/1472 = 97.5% (94.3%, 98.9%)	1434.6/1472 = 97.5% (94.3%, 98.9%)	1354.6/1472 = 92.0% (87.8%, 94.9%)
Age ≥ 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	74	161.2/165.5 = 97.4% (89.5%, 99.4%)	161.2/165.5 = 97.4% (89.5%, 99.4%)	158.6/165.5 = 95.8% (87.3%, 98.7%)
Age ≥ 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	35	44.4/1398.4 = 3.2% (0.4%, 21.1%)	44.4/1398.4 = 3.2% (0.4%, 21.1%)	0/1398.4 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	72	145.6/154.6 = 94.2% (84.9%, 97.9%)	145.6/154.6 = 94.2% (84.9%, 97.9%)	140/154.6 = 90.6% (80.8%, 95.6%)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	250	1468/1472 = 99.7% (98.1%, 100.0%)	1468/1472 = 99.7% (98.1%, 100.0%)	1441.9/1472 = 98.0% (95.0%, 99.2%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	74	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	35	44.4/1398.4 = 3.2% (0.4%, 21.1%)	44.4/1398.4 = 3.2% (0.4%, 21.1%)	0/1398.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	72	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)	153.1/154.6 = 99.0% (92.9%, 99.9%)

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 4g. 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 SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Hispanic or Latino ethnicity								
Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	136	1226.3/1363.4 = 89.9% (81.7%, 94.7%)	1226.3/1363.4 = 89.9% (81.7%, 94.7%)	1109.8/1363.4 = 81.4% (71.0%, 88.7%)
Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	35	144/145.7 = 98.8% (91.4%, 99.9%)	144/145.7 = 98.8% (91.4%, 99.9%)	141.7/145.7 = 97.2% (88.7%, 99.4%)
Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	20	28.8/1237.6 = 2.3% (0.3%, 17.1%)	28.8/1237.6 = 2.3% (0.3%, 17.1%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	38	125.7/133.7 = 94.0% (84.6%, 97.8%)	125.7/133.7 = 94.0% (84.6%, 97.8%)	90/133.7 = 67.3% (42.1%, 85.3%)
Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	136	1328.6/1363.4 = 97.4% (88.5%, 99.5%)	1328.6/1363.4 = 97.4% (88.5%, 99.5%)	1328.6/1363.4 = 97.4% (88.5%, 99.5%)
Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	35	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	20	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	38	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)	129.7/133.7 = 97.0% (87.6%, 99.3%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	690	9218.1/10481.2 = 87.9% (83.8%, 91.2%)	9272.1/10481.2 = 88.5% (84.4%, 91.6%)	8529.4/10481.2 = 81.4% (76.8%, 85.2%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	217	1119.5/1162.3 = 96.3% (90.0%, 98.7%)	1119.5/1162.3 = 96.3% (90.0%, 98.7%)	1030.9/1162.3 = 88.7% (80.6%, 93.7%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	130	120.7/10828.8 = 1.1% (0.3%, 4.6%)	120.7/10828.8 = 1.1% (0.3%, 4.6%)	0/10828.8 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	214	941.9/1121.8 = 84.0% (75.7%, 89.8%)	945.4/1121.8 = 84.3% (76.0%, 90.1%)	743.9/1121.8 = 66.3% (57.1%, 74.4%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	690	10380.4/10481.2 = 99.0% (97.9%, 99.6%)	10380.4/10481.2 = 99.0% (97.9%, 99.6%)	10269.3/10481.2 = 98.0% (96.3%, 98.9%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	217	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	130	87.5/10828.8 = 0.8% (0.2%, 3.2%)	87.5/10828.8 = 0.8% (0.2%, 3.2%)	0/10828.8 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	214	1076.3/1121.8 = 95.9% (89.7%, 98.5%)	1076.3/1121.8 = 95.9% (89.7%, 98.5%)	1048.8/1121.8 = 93.5% (86.3%, 97.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	88	1288.7/1450.4 = 88.9% (74.6%, 95.6%)	1288.7/1450.4 = 88.9% (74.6%, 95.6%)	1231.7/1450.4 = 84.9% (71.6%, 92.6%)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	22	119.6/124 = 96.5% (75.1%, 99.6%)	119.6/124 = 96.5% (75.1%, 99.6%)	115.2/124 = 92.9% (75.0%, 98.3%)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	13	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	18	72.2/101.5 = 71.1% (32.1%, 92.8%)	72.2/101.5 = 71.1% (32.1%, 92.8%)	72.2/101.5 = 71.1% (32.1%, 92.8%)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	88	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1357.1/1450.4 = 93.6% (77.2%, 98.4%)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	22	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	13	44.4/1292.7 = 3.4% (0.3%, 28.0%)	44.4/1292.7 = 3.4% (0.3%, 28.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	18	91.8/101.5 = 90.4% (52.1%, 98.8%)	91.8/101.5 = 90.4% (52.1%, 98.8%)	74.6/101.5 = 73.5% (32.9%, 94.0%)

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 ID50 pseudo-virus neutralization antibody markers by Race

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Race								
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	362	5915.2/6597 = 89.7% (84.2%, 93.4%)	5922.6/6597 = 89.8% (84.3%, 93.5%)	5515.3/6597 = 83.6% (77.6%, 88.3%)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	125	733.3/773.8 = 94.8% (85.2%, 98.3%)	733.3/773.8 = 94.8% (85.2%, 98.3%)	671.1/773.8 = 86.7% (75.6%, 93.2%)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	67	44.4/6586.8 = 0.7% (0.1%, 4.8%)	44.4/6586.8 = 0.7% (0.1%, 4.8%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	121	546.7/666.4 = 82.0% (70.0%, 90.0%)	550.2/666.4 = 82.6% (70.5%, 90.4%)	458.9/666.4 = 68.9% (56.4%, 79.1%)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	362	6531.1/6597 = 99.0% (97.8%, 99.6%)	6531.1/6597 = 99.0% (97.8%, 99.6%)	6436.8/6597 = 97.6% (95.1%, 98.8%)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	121	652.7/666.4 = 97.9% (86.3%, 99.7%)	652.7/666.4 = 97.9% (86.3%, 99.7%)	625.2/666.4 = 93.8% (82.4%, 98.0%)
Black or African American	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	195	1743.5/2012.2 = 86.6% (78.6%, 92.0%)	1743.5/2012.2 = 86.6% (78.6%, 92.0%)	1549.3/2012.2 = 77.0% (67.8%, 84.2%)
Black or African American	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	187/195.6 = 95.6% (72.5%, 99.4%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Black or African American	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	39	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)
Black or African American	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	60	220.4/265.1 = 83.2% (66.7%, 92.4%)	220.4/265.1 = 83.2% (66.7%, 92.4%)	154/265.1 = 58.1% (40.8%, 73.6%)
Black or African American	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	195	1977.3/2012.2 = 98.3% (91.8%, 99.7%)	1977.3/2012.2 = 98.3% (91.8%, 99.7%)	1977.3/2012.2 = 98.3% (91.8%, 99.7%)
Black or African American	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	39	43.1/2311.6 = 1.9% (0.2%, 13.1%)	43.1/2311.6 = 1.9% (0.2%, 13.1%)	0/2311.6 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	60	243.2/265.1 = 91.7% (74.1%, 97.7%)	243.2/265.1 = 91.7% (74.1%, 97.7%)	241.6/265.1 = 91.1% (74.1%, 97.4%)
Asian	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	67	653.8/673.6 = 97.1% (91.8%, 99.0%)	653.8/673.6 = 97.1% (91.8%, 99.0%)	630/673.6 = 93.5% (87.7%, 96.7%)
Asian	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	24	78.8/81.1 = 97.1% (80.0%, 99.7%)	78.8/81.1 = 97.1% (80.0%, 99.7%)	76.5/81.1 = 94.3% (79.4%, 98.6%)
Asian	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	12	28.8/609.1 = 4.7% (0.5%, 34.8%)	28.8/609.1 = 4.7% (0.5%, 34.8%)	0/609.1 = 0.0% (0.0%, 0.0%)
Asian	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	13	45.9/48.4 = 94.9% (64.0%, 99.5%)	45.9/48.4 = 94.9% (64.0%, 99.5%)	31.3/48.4 = 64.6% (19.5%, 93.2%)
Asian	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	67	669.7/673.6 = 99.4% (95.8%, 99.9%)	669.7/673.6 = 99.4% (95.8%, 99.9%)	665.7/673.6 = 98.8% (95.4%, 99.7%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Asian	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	24	81.1/81.1 = 100.0% (100.0%, 100.0%)	81.1/81.1 = 100.0% (100.0%, 100.0%)	81.1/81.1 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	12	0/609.1 = 0.0% (0.0%, 0.0%)	0/609.1 = 0.0% (0.0%, 0.0%)	0/609.1 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	13	45.9/48.4 = 94.9% (64.0%, 99.5%)	45.9/48.4 = 94.9% (64.0%, 99.5%)	45.9/48.4 = 94.9% (64.0%, 99.5%)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	13	151.4/151.4 = 100.0% (100.0%, 100.0%)	151.4/151.4 = 100.0% (100.0%, 100.0%)	139.5/151.4 = 92.1% (65.9%, 98.6%)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	6	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	4	5.6/15.3 = 36.5%	5.6/15.3 = 36.5%	3.1/15.3 = 20.4%
American Indian or Alaska Native	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	13	151.4/151.4 = 100.0% (100.0%, 100.0%)	151.4/151.4 = 100.0% (100.0%, 100.0%)	151.4/151.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	6	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)	31.1/31.1 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)	0/247.2 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
American Indian or Alaska Native	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	4	15.3/15.3 = 100.0%	15.3/15.3 = 100.0%	15.3/15.3 = 100.0%
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	17	98.2/98.2 = 100.0% (100.0%, 100.0%)	98.2/98.2 = 100.0% (100.0%, 100.0%)	94.3/98.2 = 96.0% (70.1%, 99.6%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	5	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	1	0/28.8 = 0.0%	0/28.8 = 0.0%	0/28.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	1	0/2.5 = 0.0%	0/2.5 = 0.0%	0/2.5 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	17	98.2/98.2 = 100.0% (100.0%, 100.0%)	98.2/98.2 = 100.0% (100.0%, 100.0%)	98.2/98.2 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	5	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)	23/23 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	1	0/28.8 = 0.0%	0/28.8 = 0.0%	0/28.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	1	2.5/2.5 = 100.0%	2.5/2.5 = 100.0%	2.5/2.5 = 100.0%
Multiracial	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	52	416.8/498.5 = 83.6% (62.3%, 94.0%)	416.8/498.5 = 83.6% (62.3%, 94.0%)	382/498.5 = 76.6% (54.9%, 89.8%)
Multiracial	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	12	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	8	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)
Multiracial	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	19	56.5/61.4 = 92.0% (71.7%, 98.1%)	56.5/61.4 = 92.0% (71.7%, 98.1%)	45.2/61.4 = 73.6% (30.6%, 94.6%)
Multiracial	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	52	494.5/498.5 = 99.2% (94.3%, 99.9%)	494.5/498.5 = 99.2% (94.3%, 99.9%)	494.5/498.5 = 99.2% (94.3%, 99.9%)
Multiracial	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	12	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)	56.4/56.4 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	8	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)	0/554 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	19	61.4/61.4 = 100.0% (100.0%, 100.0%)	61.4/61.4 = 100.0% (100.0%, 100.0%)	58.9/61.4 = 96.0% (72.4%, 99.5%)
Other	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	34	426.4/469.2 = 90.9% (68.6%, 97.8%)	426.4/469.2 = 90.9% (68.6%, 97.8%)	383.6/469.2 = 81.8% (59.3%, 93.2%)
Other	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	7	13.8/13.8 = 100.0% (100.0%, 100.0%)	13.8/13.8 = 100.0% (100.0%, 100.0%)	11.5/13.8 = 83.2% (18.4%, 99.1%)
Other	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	4	0/232.6 = 0.0%	0/232.6 = 0.0%	0/232.6 = 0.0%
Other	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	5	24.1/24.1 = 100.0% (100.0%, 100.0%)	24.1/24.1 = 100.0% (100.0%, 100.0%)	22.6/24.1 = 93.5% (32.5%, 99.8%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Other	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	34	469.2/469.2 = 100.0% (100.0%, 100.0%)	469.2/469.2 = 100.0% (100.0%, 100.0%)	469.2/469.2 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	7	13.8/13.8 = 100.0% (100.0%, 100.0%)	13.8/13.8 = 100.0% (100.0%, 100.0%)	13.8/13.8 = 100.0% (100.0%, 100.0%)
Other	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	4	0/232.6 = 0.0%	0/232.6 = 0.0%	0/232.6 = 0.0%
Other	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	5	24.1/24.1 = 100.0% (100.0%, 100.0%)	24.1/24.1 = 100.0% (100.0%, 100.0%)	24.1/24.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	87	1107.8/1413.2 = 78.4% (61.9%, 89.0%)	1154.4/1413.2 = 81.7% (65.2%, 91.4%)	1014/1413.2 = 71.8% (55.6%, 83.7%)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	20	155/155 = 100.0% (100.0%, 100.0%)	155/155 = 100.0% (100.0%, 100.0%)	139.5/155 = 90.0% (45.7%, 99.0%)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	14	76.3/1337.6 = 5.7% (0.6%, 38.4%)	76.3/1337.6 = 5.7% (0.6%, 38.4%)	0/1337.6 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	24	149.2/165.4 = 90.2% (55.7%, 98.5%)	149.2/165.4 = 90.2% (55.7%, 98.5%)	103.1/165.4 = 62.3% (33.5%, 84.4%)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	87	1413.2/1413.2 = 100.0% (100.0%, 100.0%)	1413.2/1413.2 = 100.0% (100.0%, 100.0%)	1400.5/1413.2 = 99.1% (93.6%, 99.9%)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	20	155/155 = 100.0% (100.0%, 100.0%)	155/155 = 100.0% (100.0%, 100.0%)	155/155 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	14	44.4/1337.6 = 3.3% (0.4%, 25.1%)	44.4/1337.6 = 3.3% (0.4%, 25.1%)	0/1337.6 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	24	148.3/165.4 = 89.6% (55.9%, 98.3%)	148.3/165.4 = 89.6% (55.9%, 98.3%)	148.3/165.4 = 89.6% (55.9%, 98.3%)

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 4i. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Underrepresented minority status								
Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	420	3833.3/4289 = 89.4% (84.6%, 92.8%)	3833.3/4289 = 89.4% (84.6%, 92.8%)	3490.9/4289 = 81.4% (75.8%, 86.0%)
Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	120	458/462 = 99.1% (96.5%, 99.8%)	458/462 = 99.1% (96.5%, 99.8%)	444.7/462 = 96.3% (89.1%, 98.8%)
Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	73	28.8/4319 = 0.7% (0.1%, 4.8%)	28.8/4319 = 0.7% (0.1%, 4.8%)	0/4319 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	111	374.8/439 = 85.4% (74.2%, 92.2%)	374.8/439 = 85.4% (74.2%, 92.2%)	276.8/439 = 63.1% (50.1%, 74.4%)
Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	420	4219.3/4289 = 98.4% (95.2%, 99.5%)	4219.3/4289 = 98.4% (95.2%, 99.5%)	4215.3/4289 = 98.3% (95.2%, 99.4%)
Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	120	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	73	43.1/4319 = 1.0% (0.1%, 7.0%)	43.1/4319 = 1.0% (0.1%, 7.0%)	0/4319 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	111	414.6/439 = 94.4% (83.7%, 98.3%)	414.6/439 = 94.4% (83.7%, 98.3%)	410.6/439 = 93.5% (83.4%, 97.7%)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	362	5915.2/6597 = 89.7% (84.2%, 93.4%)	5922.6/6597 = 89.8% (84.3%, 93.5%)	5515.3/6597 = 83.6% (77.6%, 88.3%)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	125	733.3/773.8 = 94.8% (85.2%, 98.3%)	733.3/773.8 = 94.8% (85.2%, 98.3%)	671.1/773.8 = 86.7% (75.6%, 93.2%)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	67	44.4/6586.8 = 0.7% (0.1%, 4.8%)	44.4/6586.8 = 0.7% (0.1%, 4.8%)	0/6586.8 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	121	546.7/666.4 = 82.0% (70.0%, 90.0%)	550.2/666.4 = 82.6% (70.5%, 90.4%)	458.9/666.4 = 68.9% (56.4%, 79.1%)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	362	6531.1/6597 = 99.0% (97.8%, 99.6%)	6531.1/6597 = 99.0% (97.8%, 99.6%)	6436.8/6597 = 97.6% (95.1%, 98.8%)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	121	652.7/666.4 = 97.9% (86.3%, 99.7%)	652.7/666.4 = 97.9% (86.3%, 99.7%)	625.2/666.4 = 93.8% (82.4%, 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 4j. 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, Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age, Underrepresented minority status								
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	192	2958/3386 = 87.4% (81.4%, 91.6%)	2958/3386 = 87.4% (81.4%, 91.6%)	2671.1/3386 = 78.9% (71.8%, 84.6%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	69	372.7/375 = 99.4% (95.6%, 99.9%)	372.7/375 = 99.4% (95.6%, 99.9%)	359.4/375 = 95.8% (86.7%, 98.8%)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	37	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	61	299.9/361 = 83.1% (69.5%, 91.4%)	299.9/361 = 83.1% (69.5%, 91.4%)	209.7/361 = 58.1% (42.8%, 72.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	192	3324.2/3386 = 98.2% (93.9%, 99.5%)	3324.2/3386 = 98.2% (93.9%, 99.5%)	3324.2/3386 = 98.2% (93.9%, 99.5%)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	69	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	37	43.1/3281 = 1.3% (0.2%, 9.4%)	43.1/3281 = 1.3% (0.2%, 9.4%)	0/3281 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	61	336.6/361 = 93.2% (80.2%, 97.9%)	336.6/361 = 93.2% (80.2%, 97.9%)	334.1/361 = 92.6% (80.0%, 97.5%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	175	4601.9/5217.3 = 88.2% (81.3%, 92.8%)	4601.9/5217.3 = 88.2% (81.3%, 92.8%)	4253.6/5217.3 = 81.5% (73.9%, 87.3%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	59	567/602.4 = 94.1% (81.1%, 98.4%)	567/602.4 = 94.1% (81.1%, 98.4%)	507.5/602.4 = 84.2% (69.9%, 92.5%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	31	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	61	407.9/517.6 = 78.8% (63.4%, 88.9%)	411.3/517.6 = 79.5% (64.0%, 89.4%)	332.4/517.6 = 64.2% (48.6%, 77.4%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	175	5166.2/5217.3 = 99.0% (97.4%, 99.6%)	5166.2/5217.3 = 99.0% (97.4%, 99.6%)	5094/5217.3 = 97.6% (94.3%, 99.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	59	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	31	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	61	503.9/517.6 = 97.3% (82.5%, 99.7%)	503.9/517.6 = 97.3% (82.5%, 99.7%)	476.4/517.6 = 92.0% (77.5%, 97.5%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	228	875.3/903 = 96.9% (93.7%, 98.5%)	875.3/903 = 96.9% (93.7%, 98.5%)	819.8/903 = 90.8% (86.2%, 93.9%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	51	85.3/87 = 98.0% (86.6%, 99.7%)	85.3/87 = 98.0% (86.6%, 99.7%)	85.3/87 = 98.0% (86.6%, 99.7%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	36	28.8/1038 = 2.8% (0.4%, 18.7%)	28.8/1038 = 2.8% (0.4%, 18.7%)	0/1038 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	50	74.9/78 = 96.0% (84.7%, 99.0%)	74.9/78 = 96.0% (84.7%, 99.0%)	67.1/78 = 86.0% (72.9%, 93.4%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	228	895.1/903 = 99.1% (96.5%, 99.8%)	895.1/903 = 99.1% (96.5%, 99.8%)	891.1/903 = 98.7% (96.0%, 99.6%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	51	87/87 = 100.0% (100.0%, 100.0%)	87/87 = 100.0% (100.0%, 100.0%)	87/87 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	36	0/1038 = 0.0% (0.0%, 0.0%)	0/1038 = 0.0% (0.0%, 0.0%)	0/1038 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	50	78/78 = 100.0% (100.0%, 100.0%)	78/78 = 100.0% (100.0%, 100.0%)	76.4/78 = 98.0% (86.3%, 99.7%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	187	1313.3/1379.7 = 95.2% (91.0%, 97.5%)	1320.7/1379.7 = 95.7% (91.6%, 97.9%)	1261.6/1379.7 = 91.4% (86.4%, 94.7%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	66	166.2/171.4 = 97.0% (88.3%, 99.3%)	166.2/171.4 = 97.0% (88.3%, 99.3%)	163.6/171.4 = 95.5% (86.5%, 98.6%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	36	44.4/1598.6 = 2.8% (0.4%, 18.7%)	44.4/1598.6 = 2.8% (0.4%, 18.7%)	0/1598.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	60	138.8/148.8 = 93.3% (83.1%, 97.5%)	138.8/148.8 = 93.3% (83.1%, 97.5%)	126.5/148.8 = 85.0% (73.2%, 92.2%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	187	1364.9/1379.7 = 98.9% (95.8%, 99.7%)	1364.9/1379.7 = 98.9% (95.8%, 99.7%)	1342.8/1379.7 = 97.3% (93.7%, 98.9%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	66	171.4/171.4 = 100.0% (100.0%, 100.0%)	171.4/171.4 = 100.0% (100.0%, 100.0%)	171.4/171.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	36	0/1598.6 = 0.0% (0.0%, 0.0%)	0/1598.6 = 0.0% (0.0%, 0.0%)	0/1598.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	60	148.8/148.8 = 100.0% (100.0%, 100.0%)	148.8/148.8 = 100.0% (100.0%, 100.0%)	148.8/148.8 = 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 5a. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by All participants

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
All participants						
	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	10 (10, 10)
	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	10 (10, 10)
	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	914	5 (5, 5)
	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	914	5 (5, 5)
	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	10 (10, 10)
	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	10 (10, 10)
	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	274	5 (5, 5)
	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	274	5 (5, 5)
	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 11)
	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)
	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	163	5 (5, 5)
	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	163	5 (5, 5)
	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	270	10 (10, 10)
	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	270	10 (10, 10)
	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	270	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	270	5 (5, 5)
	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	22926 (19863, 26460)
	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	40963 (36741, 45671)
	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	914	106 (91, 125)
	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	914	189 (161, 222)
	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	36133 (28182, 46328)
	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	79981 (65041, 98352)
	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	274	186 (142, 243)
	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	274	420 (314, 560)
	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 10)
	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)
	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	163	5 (5, 5)
	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	163	5 (5, 5)
	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	270	12861 (10150, 16296)
	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	270	18191 (15159, 21829)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	270	51 (40, 66)
	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	270	129 (98, 169)
	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	966160 (823437, 1133621)
	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	2087965 (1831068, 2380904)
	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	914	1497 (1228, 1825)
	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	914	2223 (1809, 2733)
	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	2298869 (1785648, 2959596)
	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	5346334 (4339333, 6587023)
	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	274	5680 (3863, 8351)
	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	274	7837 (5545, 11076)
	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 10)
	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)
	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	163	5 (5, 5)
	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	163	5 (5, 5)
	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	270	382614 (299829, 488256)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	270	676872 (531354, 862241)
	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	270	566 (409, 783)
	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	270	1324 (937, 1870)

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age						
Age < 65	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	10 (10, 10)
Age < 65	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	10 (10, 10)
Age < 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	432	5 (5, 5)
Age < 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	432	5 (5, 5)
Age < 65	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	10 (10, 10)
Age < 65	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	10 (10, 10)
Age < 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	146	5 (5, 5)
Age < 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	146	5 (5, 5)
Age < 65	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	80	10 (10, 11)
Age < 65	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	80	5 (5, 5)
Age < 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	80	5 (5, 5)
Age < 65	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)
Age < 65	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)
Age < 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	147	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	147	5 (5, 5)
Age < 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	17393 (14565, 20770)
Age < 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	31397 (27475, 35879)
Age < 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	432	85 (69, 103)
Age < 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	432	157 (129, 192)
Age < 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	24939 (18393, 33814)
Age < 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	59400 (46119, 76506)
Age < 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	146	144 (104, 198)
Age < 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	146	339 (238, 482)
Age < 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	80	5 (5, 5)
Age < 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	80	5 (5, 5)
Age < 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	147	9737 (7318, 12957)
Age < 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	147	13380 (10752, 16650)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	147	40 (29, 54)
Age < 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	147	106 (76, 147)
Age < 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	737116 (604473, 898866)
Age < 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	1643373 (1397160, 1932976)
Age < 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	432	1136 (890, 1449)
Age < 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	432	1750 (1355, 2260)
Age < 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	1708031 (1250384, 2333179)
Age < 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	4266733 (3292306, 5529560)
Age < 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	146	4061 (2527, 6527)
Age < 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	146	6238 (4090, 9513)
Age < 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	80	5 (5, 5)
Age < 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	80	5 (5, 5)
Age < 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	147	270061 (201183, 362521)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	147	484596 (361146, 650244)
Age < 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	147	387 (262, 572)
Age < 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	147	1009 (665, 1531)
Age ≥ 65	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	10 (10, 10)
Age ≥ 65	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	10 (10, 10)
Age ≥ 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	482	5 (5, 5)
Age ≥ 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	482	5 (5, 5)
Age ≥ 65	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	10 (10, 10)
Age ≥ 65	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	10 (10, 10)
Age ≥ 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	128	5 (5, 5)
Age ≥ 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	128	5 (5, 5)
Age ≥ 65	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	83	10 (10, 10)
Age ≥ 65	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	83	10 (10, 10)
Age ≥ 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	83	5 (5, 5)
Age ≥ 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	83	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)
Age \geq 65	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)
Age \geq 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	123	5 (5, 5)
Age \geq 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	123	5 (5, 5)
Age \geq 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	65260 (56734, 75068)
Age \geq 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	112166 (98902, 127209)
Age \geq 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	482	254 (214, 300)
Age \geq 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	482	381 (321, 451)
Age \geq 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	158619 (123545, 203649)
Age \geq 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	262073 (211994, 323982)
Age \geq 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	128	522 (373, 731)
Age \geq 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	128	988 (733, 1331)
Age \geq 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	83	10 (10, 10)
Age \geq 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	83	10 (10, 10)
Age \geq 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	83	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	83	5 (5, 5)
Age \geq 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	123	41836 (32047, 54614)
Age \geq 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	123	66891 (53117, 84238)
Age \geq 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	123	156 (112, 216)
Age \geq 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	123	301 (219, 413)
Age \geq 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	2692372 (2329146, 3112243)
Age \geq 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	5171042 (4536102, 5894857)
Age \geq 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	482	4259 (3414, 5312)
Age \geq 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	482	5506 (4535, 6685)
Age \geq 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	7520373 (6146909, 9200723)
Age \geq 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	13148461 (11661345, 14825221)
Age \geq 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	128	21658 (15437, 30385)
Age \geq 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	128	19480 (13318, 28494)
Age \geq 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	83	10 (10, 10)
Age \geq 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	83	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	83	5 (5, 5)
Age \geq 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	83	5 (5, 5)
Age \geq 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	123	1675605 (1276999, 2198632)
Age \geq 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	123	2790960 (2209589, 3525298)
Age \geq 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	123	2827 (1887, 4233)
Age \geq 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	123	4185 (2859, 6127)

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Risk for Severe Covid-19						
At-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	10 (10, 10)
At-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	10 (10, 10)
At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	469	5 (5, 5)
At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	469	5 (5, 5)
At-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)
At-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)
At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	125	5 (5, 5)
At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	125	5 (5, 5)
At-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	84	10 (10, 11)
At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	84	5 (5, 5)
At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	84	5 (5, 5)
At-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)
At-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)
At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	123	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	123	5 (5, 5)
At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	26276 (22610, 30535)
At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	45842 (40067, 52448)
At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	469	103 (87, 122)
At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	469	215 (180, 258)
At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	55528 (43641, 70653)
At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	103862 (82479, 130788)
At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	125	220 (161, 302)
At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	125	443 (318, 617)
At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	84	5 (5, 5)
At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	84	5 (5, 5)
At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	123	16713 (12642, 22096)
At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	123	26705 (21285, 33505)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	123	69 (52, 93)
At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	123	180 (133, 243)
At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	1142597 (961925, 1357205)
At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	2144439 (1840509, 2498559)
At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	469	1796 (1424, 2264)
At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	469	2766 (2265, 3377)
At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	2930270 (2216035, 3874704)
At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	6396516 (5214355, 7846688)
At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	125	6128 (4355, 8625)
At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	125	11182 (7684, 16271)
At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	84	5 (5, 5)
At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	84	5 (5, 5)
At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	123	663561 (492320, 894363)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	123	1012116 (794913, 1288669)
At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	123	931 (651, 1331)
At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	123	2086 (1418, 3067)
Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	10 (10, 10)
Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	10 (10, 10)
Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	445	5 (5, 5)
Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	445	5 (5, 5)
Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	10 (10, 10)
Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)
Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	149	5 (5, 5)
Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	149	5 (5, 5)
Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	79	10 (10, 11)
Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	79	10 (10, 10)
Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	79	5 (5, 5)
Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	79	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)
Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)
Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	147	5 (5, 5)
Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	147	5 (5, 5)
Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	21736 (17965, 26298)
Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	39200 (34023, 45165)
Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	445	108 (87, 133)
Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	445	180 (145, 223)
Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	31130 (22510, 43050)
Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	73051 (55946, 95386)
Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	149	175 (124, 247)
Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	149	412 (284, 597)
Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	79	10 (10, 10)
Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	79	10 (10, 10)
Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	79	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	79	5 (5, 5)
Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	147	11818 (8756, 15950)
Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	147	16070 (12770, 20222)
Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	147	47 (34, 64)
Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	147	116 (82, 164)
Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	904842 (732112, 1118324)
Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	2066294 (1739231, 2454861)
Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	445	1394 (1075, 1808)
Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	445	2041 (1549, 2690)
Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	2113273 (1525010, 2928453)
Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	5023873 (3827375, 6594416)
Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	149	5532 (3337, 9171)
Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	149	6928 (4429, 10838)
Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	79	10 (10, 10)
Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	79	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	79	5 (5, 5)
Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	79	5 (5, 5)
Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	147	320294 (235413, 435781)
Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	147	594413 (435730, 810886)
Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	147	482 (318, 728)
Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	147	1143 (737, 1774)

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age, Risk for Severe Covid-19						
Age < 65 At-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	10 (10, 10)
Age < 65 At-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	10 (10, 10)
Age < 65 At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	214	5 (5, 5)
Age < 65 At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	214	5 (5, 5)
Age < 65 At-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)
Age < 65 At-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)
Age < 65 At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	73	5 (5, 5)
Age < 65 At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	73	5 (5, 5)
Age < 65 At-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 10)
Age < 65 At-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 11)
Age < 65 At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	40	5 (5, 5)
Age < 65 At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	40	5 (5, 5)
Age < 65 At-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)
Age < 65 At-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)
Age < 65 At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	75	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	75	5 (5, 5)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	16530 (13368, 20441)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	31028 (25725, 37423)
Age < 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	214	68 (54, 85)
Age < 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	214	159 (123, 204)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	30603 (22501, 41623)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	62641 (46271, 84801)
Age < 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	73	142 (95, 213)
Age < 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	73	291 (187, 453)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 10)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 10)
Age < 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	40	5 (5, 6)
Age < 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	40	5 (5, 5)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10221 (7219, 14470)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	75	16112 (12299, 21107)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	75	48 (34, 67)
Age < 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	75	127 (87, 186)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	761200 (595277, 973370)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	1498825 (1211392, 1854460)
Age < 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	214	1203 (876, 1652)
Age < 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	214	2067 (1571, 2720)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	1815884 (1228679, 2683724)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	4547755 (3405518, 6073108)
Age < 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	73	2953 (1859, 4690)
Age < 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	73	7954 (4852, 13039)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 11)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 10)
Age < 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	40	5 (5, 5)
Age < 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	40	5 (5, 5)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	75	417627 (286526, 608715)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	75	575539 (423609, 781958)
Age < 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	75	502 (325, 776)
Age < 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	75	1382 (851, 2245)
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	10 (10, 10)
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	10 (10, 10)
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	218	5 (5, 5)
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	218	5 (5, 5)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	73	5 (5, 5)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	73	5 (5, 5)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 11)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 10)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	40	5 (5, 5)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	40	5 (5, 6)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)
Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)
Age < 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	72	5 (5, 5)
Age < 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	72	5 (5, 5)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	17639 (14174, 21953)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	31500 (26782, 37050)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	218	90 (70, 115)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	218	157 (122, 200)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	23567 (16129, 34434)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	58534 (42846, 79967)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	73	144 (97, 214)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	73	353 (229, 545)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 10)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 10)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	40	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	40	5 (5, 5)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	72	9616 (6788, 13622)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	72	12751 (9770, 16642)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	72	38 (26, 55)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	72	101 (68, 150)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	730590 (572430, 932450)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	1685764 (1382036, 2056240)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	218	1118 (830, 1506)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	218	1671 (1216, 2295)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	1679359 (1144789, 2463552)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	4192147 (3040678, 5779665)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	73	4435 (2453, 8017)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	73	5833 (3464, 9821)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 10)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	40	5 (5, 5)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	40	5 (5, 5)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	72	241209 (168681, 344922)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	72	463469 (322830, 665378)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	72	362 (224, 583)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	72	930 (559, 1549)
Age ≥ 65 At-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	10 (10, 10)
Age ≥ 65 At-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	10 (10, 10)
Age ≥ 65 At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	255	5 (5, 5)
Age ≥ 65 At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	255	5 (5, 5)
Age ≥ 65 At-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Age ≥ 65 At-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Age ≥ 65 At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	52	5 (5, 6)
Age ≥ 65 At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	52	5 (5, 5)
Age ≥ 65 At-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	44	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 At-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	44	5 (5, 5)
Age \geq 65 At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	44	5 (5, 5)
Age \geq 65 At-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	48	10 (10, 11)
Age \geq 65 At-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	48	5 (5, 5)
Age \geq 65 At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	48	5 (5, 5)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	54232 (44615, 65922)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	84391 (70325, 101269)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	255	199 (157, 252)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	255	348 (276, 438)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	188670 (129392, 275106)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	293282 (210942, 407763)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	52	541 (337, 870)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	52	1052 (680, 1627)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	44	5 (5, 5)
Age \geq 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	44	5 (5, 5)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	48	48060 (30237, 76388)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	48	79058 (52125, 119908)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	48	155 (89, 270)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	48	378 (233, 613)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	2156196 (1736284, 2677662)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	3754377 (3053564, 4616033)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	255	3359 (2423, 4656)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	255	4361 (3299, 5763)
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	7826271 (5853680, 10463591)
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	12884976 (10641883, 15600868)
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	52	27431 (17819, 42227)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	52	22502 (13237, 38254)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	44	5 (5, 5)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	44	5 (5, 6)
Age \geq 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	48	1793880 (1112795, 2891824)
Age \geq 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	48	3402410 (2325361, 4978321)
Age \geq 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	48	3501 (1863, 6577)
Age \geq 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	48	5048 (2709, 9408)
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	227	5 (5, 5)
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	227	5 (5, 5)
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	76	5 (5, 5)
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	76	5 (5, 5)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	39	5 (5, 5)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	39	5 (5, 5)
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	75	5 (5, 5)
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	75	5 (5, 5)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	80069 (65707, 97571)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	153593 (130667, 180543)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	227	332 (263, 418)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	227	421 (328, 540)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	139826 (99996, 195520)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	241494 (182978, 318724)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	76	508 (317, 815)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	76	944 (626, 1422)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	39	5 (5, 5)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	39	5 (5, 5)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	75	38048 (27669, 52321)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	75	59664 (45819, 77691)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	75	156 (105, 232)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	75	257 (170, 390)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	3441017 (2860842, 4138850)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	7365218 (6408010, 8465410)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	227	5534 (4137, 7404)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	227	7125 (5468, 9285)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	7305563 (5522547, 9664247)
Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	13343347 (11421210, 15588971)
Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	76	18240 (11134, 29880)
Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	76	17541 (10280, 29932)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	39	5 (5, 6)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	39	5 (5, 5)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	75	1599200 (1156266, 2211811)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	75	2437171 (1815977, 3270859)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	75	2442 (1442, 4134)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	75	3681 (2278, 5949)

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Sex						
Male	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	10 (10, 10)
Male	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	10 (10, 10)
Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	395	5 (5, 5)
Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	395	5 (5, 5)
Male	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)
Male	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)
Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	121	5 (5, 5)
Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	121	5 (5, 5)
Male	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	76	11 (9, 12)
Male	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	76	10 (10, 10)
Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	76	5 (5, 5)
Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	76	5 (5, 5)
Male	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	115	10 (10, 10)
Male	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	115	10 (10, 10)
Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	115	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	115	5 (5, 5)
Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	25738 (20110, 32941)
Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	40290 (34397, 47193)
Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	395	121 (93, 157)
Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	395	207 (158, 272)
Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	43301 (30763, 60949)
Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	83762 (65541, 107048)
Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	121	223 (158, 315)
Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	121	449 (303, 666)
Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	76	10 (10, 10)
Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	76	10 (10, 10)
Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	76	5 (5, 5)
Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	76	5 (5, 5)
Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	115	12838 (8743, 18852)
Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	115	16359 (12044, 22219)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	115	43 (29, 63)
Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	115	100 (68, 146)
Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	1032572 (803692, 1326633)
Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	2448348 (1992531, 3008439)
Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	395	1983 (1427, 2754)
Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	395	2322 (1694, 3181)
Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	2628794 (1842173, 3751308)
Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	5518909 (4222583, 7213204)
Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	121	5567 (3235, 9581)
Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	121	9590 (6259, 14696)
Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	76	10 (10, 10)
Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	76	10 (10, 10)
Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	76	5 (5, 5)
Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	76	5 (5, 5)
Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	115	361345 (243436, 536364)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	115	578439 (406742, 822616)
Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	115	606 (358, 1023)
Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	115	930 (554, 1559)
Female	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	10 (10, 10)
Female	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	10 (10, 10)
Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	519	5 (5, 5)
Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	519	5 (5, 5)
Female	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	10 (10, 10)
Female	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	10 (10, 10)
Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	153	5 (5, 5)
Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	153	5 (5, 5)
Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)
Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)
Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	87	5 (5, 5)
Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	87	5 (5, 6)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	155	10 (10, 10)
Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	155	10 (10, 10)
Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	155	5 (5, 5)
Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	155	5 (5, 5)
Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	21234 (17837, 25278)
Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	41415 (35725, 48012)
Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	519	98 (80, 120)
Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	519	178 (145, 218)
Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	32117 (22658, 45526)
Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	77611 (57216, 105276)
Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	153	165 (113, 242)
Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	153	401 (268, 602)
Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)
Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)
Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	87	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	87	5 (5, 5)
Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	155	12876 (9489, 17472)
Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	155	19468 (15496, 24459)
Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	155	58 (42, 81)
Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	155	152 (105, 219)
Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	924524 (750510, 1138886)
Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	1878895 (1586011, 2225864)
Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	519	1243 (972, 1588)
Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	519	2160 (1643, 2840)
Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	2106655 (1490680, 2977161)
Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	5236885 (3880756, 7066912)
Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	153	5754 (3356, 9868)
Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	153	6872 (4174, 11314)
Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)
Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	87	5 (5, 5)
Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	87	5 (5, 5)
Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	155	396863 (289955, 543189)
Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	155	748414 (540245, 1036794)
Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	155	541 (355, 825)
Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	155	1659 (1064, 2588)

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age, sex						
Age < 65 Female	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	10 (10, 10)
Age < 65 Female	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	10 (10, 10)
Age < 65 Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	269	5 (5, 5)
Age < 65 Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	269	5 (5, 5)
Age < 65 Female	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	10 (10, 10)
Age < 65 Female	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	10 (10, 10)
Age < 65 Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	79	5 (5, 5)
Age < 65 Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	79	5 (5, 5)
Age < 65 Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	52	5 (5, 5)
Age < 65 Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	52	5 (5, 6)
Age < 65 Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	83	10 (10, 10)
Age < 65 Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	83	10 (10, 10)
Age < 65 Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	83	5 (5, 6)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	83	5 (5, 5)
Age < 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	16543 (13418, 20396)
Age < 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	32705 (27399, 39039)
Age < 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	269	79 (62, 101)
Age < 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	269	150 (118, 191)
Age < 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	21789 (14248, 33321)
Age < 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	56962 (39317, 82526)
Age < 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	79	124 (78, 197)
Age < 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	79	319 (195, 522)
Age < 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	52	5 (5, 5)
Age < 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	52	5 (5, 5)
Age < 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	83	10100 (6984, 14608)
Age < 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	83	14961 (11369, 19689)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	83	46 (31, 69)
Age < 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	83	133 (86, 207)
Age < 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	725439 (563976, 933126)
Age < 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	1494002 (1218429, 1831901)
Age < 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	269	946 (706, 1267)
Age < 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	269	1691 (1216, 2352)
Age < 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	1557246 (1019727, 2378101)
Age < 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	4234642 (2930914, 6118296)
Age < 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	79	4195 (2173, 8100)
Age < 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	79	5422 (2964, 9918)
Age < 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	52	5 (5, 5)
Age < 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	52	5 (5, 5)
Age < 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	83	293632 (201048, 428852)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	83	571578 (384900, 848795)
Age < 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	83	387 (233, 641)
Age < 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	83	1375 (804, 2349)
Age < 65 Male	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 10)
Age < 65 Male	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)
Age < 65 Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	163	5 (5, 5)
Age < 65 Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	163	5 (5, 5)
Age < 65 Male	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	10 (10, 10)
Age < 65 Male	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	10 (10, 10)
Age < 65 Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	67	5 (5, 5)
Age < 65 Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	67	5 (5, 5)
Age < 65 Male	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	28	11 (9, 13)
Age < 65 Male	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	28	10 (10, 10)
Age < 65 Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	28	5 (5, 5)
Age < 65 Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	28	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Male	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	64	10 (10, 10)
Age < 65 Male	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	64	10 (10, 10)
Age < 65 Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	64	5 (5, 5)
Age < 65 Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	64	5 (5, 5)
Age < 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	18877 (13705, 26001)
Age < 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	29372 (24030, 35901)
Age < 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	163	94 (67, 132)
Age < 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	163	169 (118, 240)
Age < 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	30884 (20281, 47031)
Age < 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	63477 (47023, 85688)
Age < 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	67	180 (119, 274)
Age < 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	67	372 (229, 604)
Age < 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	28	10 (10, 10)
Age < 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	28	10 (10, 10)
Age < 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	28	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	28	5 (5, 5)
Age < 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	64	9188 (5784, 14598)
Age < 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	64	11210 (7775, 16161)
Age < 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	64	31 (20, 50)
Age < 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	64	73 (47, 115)
Age < 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	756600 (546757, 1046981)
Age < 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	1920202 (1472176, 2504576)
Age < 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	163	1532 (1004, 2337)
Age < 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	163	1850 (1231, 2781)
Age < 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	1977267 (1268954, 3080952)
Age < 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	4318054 (3077671, 6058343)
Age < 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	67	3857 (1960, 7590)
Age < 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	67	7789 (4625, 13117)
Age < 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	28	10 (10, 11)
Age < 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	28	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	28	5 (5, 5)
Age < 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	28	5 (5, 5)
Age < 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	64	236528 (146661, 381460)
Age < 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	64	373064 (243212, 572245)
Age < 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	64	387 (206, 728)
Age < 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	64	618 (331, 1154)
Age ≥ 65 Male	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	10 (10, 10)
Age ≥ 65 Male	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	10 (10, 10)
Age ≥ 65 Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	232	5 (5, 5)
Age ≥ 65 Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	232	5 (5, 5)
Age ≥ 65 Male	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	10 (10, 10)
Age ≥ 65 Male	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	10 (10, 10)
Age ≥ 65 Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	54	5 (5, 6)
Age ≥ 65 Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	54	5 (5, 5)
Age ≥ 65 Male	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	48	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Male	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	48	5 (5, 5)
Age \geq 65 Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	48	5 (5, 5)
Age \geq 65 Male	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)
Age \geq 65 Male	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)
Age \geq 65 Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	51	5 (5, 6)
Age \geq 65 Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	51	5 (5, 5)
Age \geq 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	66467 (53933, 81913)
Age \geq 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	105989 (87935, 127749)
Age \geq 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	232	259 (203, 330)
Age \geq 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	232	390 (306, 496)
Age \geq 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	148457 (98119, 224620)
Age \geq 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	230231 (167261, 316907)
Age \geq 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	54	482 (286, 812)
Age \geq 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	54	895 (560, 1432)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	48	5 (5, 5)
Age \geq 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	48	5 (5, 5)
Age \geq 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	51	50082 (30542, 82125)
Age \geq 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	51	76189 (49115, 118188)
Age \geq 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	51	147 (82, 263)
Age \geq 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	51	350 (196, 626)
Age \geq 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	2674328 (2152728, 3322311)
Age \geq 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	5149990 (4231902, 6267253)
Age \geq 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	232	4362 (3133, 6074)
Age \geq 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	232	4649 (3501, 6173)
Age \geq 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	7426127 (5296972, 10411111)
Age \geq 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	13502491 (11607977, 15706205)
Age \geq 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	54	21221 (12633, 35647)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	54	20477 (11619, 36087)
Age \geq 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	48	5 (5, 5)
Age \geq 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	48	5 (5, 5)
Age \geq 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	51	2027539 (1259961, 3262731)
Age \geq 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	51	3447429 (2322804, 5116559)
Age \geq 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	51	3730 (1880, 7401)
Age \geq 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	51	4892 (2560, 9348)
Age \geq 65 Female	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	10 (10, 10)
Age \geq 65 Female	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	10 (10, 10)
Age \geq 65 Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	250	5 (5, 5)
Age \geq 65 Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	250	5 (5, 5)
Age \geq 65 Female	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	10 (10, 10)
Age \geq 65 Female	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	74	5 (5, 6)
Age \geq 65 Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	74	5 (5, 5)
Age \geq 65 Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	35	5 (5, 5)
Age \geq 65 Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	35	5 (5, 5)
Age \geq 65 Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)
Age \geq 65 Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)
Age \geq 65 Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	72	5 (5, 5)
Age \geq 65 Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	72	5 (5, 5)
Age \geq 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	64209 (53151, 77567)
Age \geq 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	117943 (99447, 139878)
Age \geq 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	250	249 (197, 315)
Age \geq 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	250	373 (294, 474)
Age \geq 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	166523 (121761, 227741)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	288235 (216852, 383115)
Age \geq 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	74	553 (354, 864)
Age \geq 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	74	1062 (720, 1566)
Age \geq 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	35	5 (5, 5)
Age \geq 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	35	5 (5, 5)
Age \geq 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	72	37051 (27449, 50013)
Age \geq 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	72	61265 (47638, 78789)
Age \geq 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	72	162 (110, 238)
Age \geq 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	72	271 (188, 392)
Age \geq 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	2708471 (2228982, 3291105)
Age \geq 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	5189777 (4355492, 6183867)
Age \geq 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	250	4169 (3097, 5612)
Age \geq 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	250	6397 (4907, 8340)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	7590360 (5921961, 9728799)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	12894340 (10799304, 15395807)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	74	21984 (13986, 34558)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	74	18779 (11189, 31518)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	35	10 (10, 10)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	35	10 (10, 10)
Age ≥ 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	35	5 (5, 5)
Age ≥ 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	35	5 (5, 6)
Age ≥ 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	72	1473236 (1067157, 2033836)
Age ≥ 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	72	2420004 (1820068, 3217693)
Age ≥ 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	72	2344 (1427, 3849)
Age ≥ 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	72	3767 (2352, 6032)

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Hispanic or Latino ethnicity						
Hispanic or Latino	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	10 (10, 10)
Hispanic or Latino	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	10 (10, 10)
Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	136	5 (5, 5)
Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	136	5 (5, 6)
Hispanic or Latino	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	10 (10, 10)
Hispanic or Latino	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	10 (10, 10)
Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	35	5 (5, 5)
Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	35	5 (5, 5)
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	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 RBD IgG (IU/ml)	38	10 (10, 10)
Hispanic or Latino	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	38	10 (10, 10)
Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	38	6 (5, 7)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	38	5 (5, 5)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	22266 (15847, 31284)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	41773 (31562, 55289)
Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	136	101 (67, 152)
Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	136	190 (126, 284)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	57339 (30559, 107588)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	90332 (50343, 162084)
Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	35	254 (155, 417)
Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	35	498 (236, 1049)
Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	20	10 (10, 10)
Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	20	10 (10, 10)
Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	20	5 (5, 5)
Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	20	6 (4, 8)
Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	38	34815 (16110, 75239)
Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	38	26708 (12585, 56680)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	38	118 (42, 327)
Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	38	351 (151, 818)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	1087406 (737091, 1604213)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	2082654 (1564176, 2772993)
Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	136	1727 (1013, 2946)
Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	136	2444 (1373, 4350)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	2735111 (1368395, 5466868)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	7578287 (5040721, 11393296)
Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	35	7727 (2908, 20532)
Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	35	10208 (4492, 23195)
Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	20	10 (10, 10)
Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	20	10 (10, 10)
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 RBD IgG (IU/ml)	38	747435 (391924, 1425424)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	38	1403460 (609038, 3234119)
Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	38	1522 (466, 4976)
Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	38	3063 (1057, 8877)
Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	10 (10, 10)
Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	10 (10, 10)
Not Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	690	5 (5, 5)
Not Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	690	5 (5, 5)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	10 (10, 10)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	10 (10, 10)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	217	5 (5, 5)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	217	5 (5, 5)
Not Hispanic or Latino	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	130	5 (5, 5)
Not Hispanic or Latino	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	130	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not Hispanic or Latino	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	214	10 (10, 10)
Not Hispanic or Latino	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	214	10 (10, 10)
Not Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	214	5 (5, 5)
Not Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	214	5 (5, 5)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	23020 (19425, 27280)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	39694 (35055, 44946)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	690	104 (86, 125)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	690	191 (158, 230)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	35344 (26390, 47337)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	83383 (65546, 106075)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	217	183 (133, 251)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	217	411 (294, 575)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	130	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	130	5 (5, 5)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	214	11608 (9046, 14896)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	214	18056 (14910, 21865)
Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	214	48 (37, 63)
Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	214	123 (92, 165)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	987977 (822264, 1187086)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	2063432 (1775937, 2397468)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	690	1500 (1191, 1888)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	690	2270 (1788, 2883)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	2315554 (1731123, 3097290)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	5301268 (4150604, 6770929)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	217	5224 (3348, 8151)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	217	7937 (5300, 11886)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	130	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	130	5 (5, 5)
Not Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	130	5 (5, 5)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	214	381696 (293138, 497006)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	214	648311 (505732, 831086)
Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	214	555 (395, 782)
Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	214	1324 (921, 1904)
Not reported and unknown	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	88	5 (5, 5)
Not reported and unknown	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	88	5 (5, 5)
Not reported and unknown	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	22	6 (4, 7)
Not reported and unknown	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	22	5 (5, 5)
Not reported and unknown	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	13	12 (8, 18)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	13	5 (5, 5)
Not reported and unknown	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	13	5 (5, 5)
Not reported and unknown	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	18	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	18	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	18	5 (5, 5)
Not reported and unknown	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	18	5 (5, 5)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	22876 (15904, 32905)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	50488 (35885, 71034)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	88	133 (84, 213)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	88	174 (106, 287)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	25827 (18334, 36382)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	46903 (33825, 65038)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	22	154 (91, 259)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	22	420 (198, 891)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	13	5 (5, 5)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	13	5 (5, 5)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	18	10750 (3611, 32001)
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	18	11909 (5649, 25107)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	18	37 (15, 93)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	18	58 (19, 177)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	735710 (462524, 1170251)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	2279592 (1446853, 3591615)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	88	1291 (765, 2178)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	88	1748 (990, 3088)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	1751283 (872333, 3515850)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	3840709 (2197166, 6713669)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	22	8669 (2979, 25223)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	22	5104 (2140, 12175)
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	13	5 (5, 5)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	13	5 (5, 5)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	18	162620 (55659, 475135)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	18	417076 (107739, 1614570)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	18	188 (46, 766)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	18	437 (69, 2773)

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Race						
White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	362	5 (5, 5)
White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	362	5 (5, 5)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	125	5 (5, 5)
White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	125	5 (5, 5)
White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)
White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	67	5 (5, 6)
White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	121	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	121	5 (5, 5)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	23438 (18669, 29425)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	40376 (34349, 47460)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	362	115 (90, 147)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	362	188 (146, 241)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	30985 (21434, 44793)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	72481 (53061, 99008)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	125	148 (104, 211)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	125	348 (226, 535)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	67	5 (5, 5)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10931 (7560, 15804)
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	121	18868 (14808, 24043)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	121	52 (37, 74)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	121	107 (76, 150)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	1035293 (809568, 1323956)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	2145772 (1770774, 2600184)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	362	1376 (1010, 1874)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	362	2011 (1465, 2761)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	1943813 (1349835, 2799166)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	4608987 (3338577, 6362819)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	125	4550 (2471, 8378)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	125	7994 (4646, 13757)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	67	5 (5, 5)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	121	393045 (287516, 537306)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	121	674526 (485396, 937351)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	121	575 (371, 892)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	121	1478 (953, 2292)
Black or African American	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	10 (10, 11)
Black or African American	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	10 (10, 10)
Black or African American	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	195	5 (5, 5)
Black or African American	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	195	5 (5, 5)
Black or African American	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Black or African American	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Black or African American	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	52	5 (5, 5)
Black or African American	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	52	5 (5, 5)
Black or African American	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	39	5 (5, 5)
Black or African American	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	39	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Black or African American	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)
Black or African American	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)
Black or African American	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	60	5 (5, 6)
Black or African American	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	60	5 (5, 5)
Black or African American	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	18966 (14305, 25146)
Black or African American	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	33478 (26923, 41629)
Black or African American	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	195	80 (57, 111)
Black or African American	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	195	168 (116, 244)
Black or African American	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	49806 (32279, 76849)
Black or African American	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	92510 (63827, 134083)
Black or African American	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	52	240 (126, 455)
Black or African American	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	52	595 (282, 1255)
Black or African American	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	39	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Black or African American	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	39	5 (5, 5)
Black or African American	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	60	13142 (8909, 19387)
Black or African American	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	60	17281 (11001, 27148)
Black or African American	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	60	44 (24, 81)
Black or African American	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	60	170 (88, 328)
Black or African American	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	700976 (482795, 1017755)
Black or African American	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	1698222 (1265203, 2279444)
Black or African American	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	195	1634 (1060, 2520)
Black or African American	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	195	2461 (1568, 3861)
Black or African American	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	3863173 (2496394, 5978266)
Black or African American	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	5233980 (3292870, 8319352)
Black or African American	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	52	9353 (5430, 16111)
Black or African American	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	52	10207 (5426, 19200)
Black or African American	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Black or African American	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	39	5 (5, 5)
Black or African American	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	39	5 (5, 5)
Black or African American	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	60	304404 (168043, 551417)
Black or African American	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	60	604842 (358324, 1020956)
Black or African American	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	60	572 (270, 1213)
Black or African American	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	60	1276 (599, 2723)
Asian	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
Asian	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)
Asian	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)
Asian	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	67	5 (5, 6)
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	Pseudovirus-nAb ID50	24	5 (5, 5)
Asian	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	24	6 (5, 7)
Asian	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	12	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Asian	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	12	10 (10, 10)
Asian	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	12	5 (5, 5)
Asian	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	12	5 (5, 5)
Asian	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	13	10 (10, 10)
Asian	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	13	10 (10, 10)
Asian	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	13	5 (5, 5)
Asian	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	13	5 (5, 5)
Asian	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	33349 (22259, 49964)
Asian	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	63758 (45931, 88504)
Asian	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	67	144 (92, 225)
Asian	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	67	330 (204, 534)
Asian	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	24	24553 (12536, 48091)
Asian	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	24	49522 (26709, 91821)
Asian	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	24	174 (94, 325)
Asian	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	24	368 (184, 735)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Asian	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	12	10 (10, 10)
Asian	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	12	10 (10, 10)
Asian	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	12	5 (5, 6)
Asian	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	12	5 (5, 5)
Asian	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	13	27396 (5431, 138186)
Asian	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	13	12500 (4740, 32962)
Asian	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	13	65 (17, 245)
Asian	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	13	146 (18, 1215)
Asian	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	1685637 (1167594, 2433528)
Asian	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	2633046 (1864450, 3718486)
Asian	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	67	2850 (1578, 5149)
Asian	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	67	3805 (1835, 7889)
Asian	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	24	2094481 (742718, 5906481)
Asian	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	24	4848443 (2478358, 9485072)
Asian	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	24	6020 (2360, 15360)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Asian	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	24	8404 (2608, 27081)
Asian	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	12	10 (10, 10)
Asian	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	12	10 (10, 10)
Asian	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	12	5 (5, 5)
Asian	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	12	5 (5, 5)
Asian	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	13	750472 (176753, 3186420)
Asian	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	13	859200 (168867, 4371633)
Asian	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	13	482 (269, 862)
Asian	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	13	1167 (203, 6693)
American Indian or Alaska Native	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	10 (10, 10)
American Indian or Alaska Native	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)
American Indian or Alaska Native	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	13	5 (5, 5)
American Indian or Alaska Native	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	13	5 (5, 5)
American Indian or Alaska Native	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	10 (10, 10)
American Indian or Alaska Native	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
American Indian or Alaska Native	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	6	5 (5, 5)
American Indian or Alaska Native	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	6	7 (4, 14)
American Indian or Alaska Native	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5	5 (5, 5)
American Indian or Alaska Native	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5	5 (5, 7)
American Indian or Alaska Native	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	4	10 (10, 10)
American Indian or Alaska Native	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	4	10 (10, 10)
American Indian or Alaska Native	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	4	5 (5, 5)
American Indian or Alaska Native	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	4	5 (5, 5)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	42283 (20288, 88120)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	30785 (13439, 70516)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	13	186 (63, 554)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	13	309 (55, 1753)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	22761 (8134, 63689)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	85898 (68138, 108288)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	6	244 (182, 327)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	6	1338 (620, 2888)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5	5 (5, 5)
American Indian or Alaska Native	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5	5 (5, 5)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	4	7559 (3837, 14892)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	4	5348 (1735, 16488)
American Indian or Alaska Native	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	4	13 (4, 46)
American Indian or Alaska Native	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	4	79 (32, 190)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	836025 (283249, 2467576)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	4760602 (2359191, 9606399)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	13	3381 (548, 20856)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	13	4097 (1137, 14766)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	2320038 (501453, 10733961)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	7507181 (3379449, 16676615)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	6	8919 (1502, 52953)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	6	9789 (1020, 93964)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5	5 (5, 5)
American Indian or Alaska Native	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5	5 (5, 5)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	4	272152 (65917, 1123631)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	4	677711 (214540, 2140827)
American Indian or Alaska Native	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	4	126 (26, 608)
American Indian or Alaska Native	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	4	520 (61, 4436)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	11 (9, 14)
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	Pseudovirus-nAb ID50	17	6 (4, 8)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	17	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	1	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	1	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	1	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	1	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	114776 (53301, 247155)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	116196 (67714, 199391)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	17	381 (198, 736)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	17	982 (339, 2849)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	44998 (2885, 701952)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	107953 (71167, 163752)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	5	227 (17, 2989)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	5	489 (239, 1000)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	1	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	1	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	1	6237 (6237, 6237)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	1	10844 (10844, 10844)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	1	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	1	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	5533419 (2490433, 12294540)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	7662810 (3323463, 17667914)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	17	10464 (2274, 48150)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	17	4635 (2089, 10284)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	1828480 (947016, 3530396)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	5139344 (595014, 44390337)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	5	2545 (185, 35084)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	5	1804 (213, 15248)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	1	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	1	5 (5, 5)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	1	4780 (4780, 4780)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	1	61376 (61376, 61376)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	1	44 (44, 44)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	1	144 (144, 144)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Multiracial	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Multiracial	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Multiracial	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	52	5 (5, 5)
Multiracial	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	52	5 (5, 5)
Multiracial	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	10 (10, 10)
Multiracial	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	10 (10, 10)
Multiracial	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	12	5 (5, 5)
Multiracial	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	12	5 (5, 5)
Multiracial	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	8	5 (5, 5)
Multiracial	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	8	5 (5, 5)
Multiracial	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	19	10 (10, 10)
Multiracial	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	19	10 (10, 10)
Multiracial	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	19	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Multiracial	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	19	5 (5, 5)
Multiracial	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	21505 (13701, 33755)
Multiracial	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	45067 (27165, 74765)
Multiracial	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	52	71 (38, 130)
Multiracial	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	52	135 (82, 222)
Multiracial	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	55196 (16260, 187371)
Multiracial	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	155885 (67996, 357377)
Multiracial	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	12	398 (197, 804)
Multiracial	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	12	277 (153, 502)
Multiracial	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	8	5 (5, 5)
Multiracial	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	8	5 (5, 5)
Multiracial	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	19	24792 (13458, 45670)
Multiracial	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	19	25261 (11298, 56479)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Multiracial	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	19	51 (28, 93)
Multiracial	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	19	190 (60, 600)
Multiracial	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	1262157 (710446, 2242309)
Multiracial	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	2195866 (1476648, 3265387)
Multiracial	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	52	1524 (697, 3334)
Multiracial	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	52	1963 (778, 4953)
Multiracial	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	3777504 (1786314, 7988255)
Multiracial	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	8118223 (3167974, 20803689)
Multiracial	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	12	2411 (687, 8455)
Multiracial	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	12	10135 (6049, 16979)
Multiracial	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	8	5 (5, 5)
Multiracial	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	8	5 (5, 5)
Multiracial	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	19	693982 (285837, 1684912)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Multiracial	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	19	791515 (327732, 1911609)
Multiracial	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	19	1034 (211, 5057)
Multiracial	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	19	2744 (676, 11140)
Other	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	10 (10, 10)
Other	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	10 (10, 10)
Other	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	34	5 (5, 5)
Other	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	34	6 (5, 7)
Other	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	10 (10, 10)
Other	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	10 (10, 10)
Other	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	7	5 (5, 5)
Other	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	7	5 (5, 5)
Other	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	4	10 (10, 10)
Other	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	4	10 (10, 10)
Other	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	4	5 (5, 5)
Other	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	4	6 (4, 8)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Other	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)
Other	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)
Other	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5	5 (5, 5)
Other	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5	5 (5, 5)
Other	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	22295 (11570, 42963)
Other	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	38007 (21259, 67950)
Other	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	34	118 (54, 259)
Other	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	34	254 (100, 650)
Other	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	18039 (7489, 43449)
Other	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	75844 (32129, 179037)
Other	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	7	63 (18, 221)
Other	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	7	283 (86, 936)
Other	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	4	10 (10, 10)
Other	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	4	10 (10, 10)
Other	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	4	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Other	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	4	5 (5, 5)
Other	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	5	49870 (993, 2505753)
Other	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	5	40496 (1871, 876366)
Other	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	5	221 (12, 4185)
Other	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	5	295 (27, 3229)
Other	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	959325 (467189, 1969877)
Other	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	2238776 (1221484, 4103302)
Other	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	34	1974 (715, 5452)
Other	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	34	3391 (1017, 11315)
Other	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	4612046 (1663462, 12787169)
Other	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	5745695 (3340937, 9881364)
Other	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	7	2543 (573, 11275)
Other	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	7	4503 (1467, 13817)
Other	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	4	10 (10, 10)
Other	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	4	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Other	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	4	5 (5, 5)
Other	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	4	5 (5, 5)
Other	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	5	390164 (12362, 12313729)
Other	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	5	1950467 (62864, 60516607)
Other	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	5	6112 (27, 1395272)
Other	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	5	1609 (34, 75283)
Not reported and unknown	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	87	5 (5, 5)
Not reported and unknown	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	87	5 (5, 5)
Not reported and unknown	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	20	6 (5, 7)
Not reported and unknown	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	20	5 (5, 5)
Not reported and unknown	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	14	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	14	5 (5, 5)
Not reported and unknown	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	14	5 (5, 5)
Not reported and unknown	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	24	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	24	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	24	6 (5, 7)
Not reported and unknown	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	24	5 (5, 6)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	19972 (12070, 33047)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	41499 (27382, 62895)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	87	85 (51, 144)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	87	167 (114, 245)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	57668 (23639, 140684)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	112437 (52711, 239834)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	20	348 (94, 1295)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	20	581 (199, 1695)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	14	5 (5, 6)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	14	5 (5, 5)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	24	11890 (6465, 21867)
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	24	17779 (10512, 30069)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	24	46 (19, 111)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	24	168 (59, 476)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	958206 (602856, 1523015)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	1898203 (1201387, 2999181)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	87	1331 (758, 2339)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	87	2345 (1156, 4755)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	3239260 (1199389, 8748461)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	9280577 (5784309, 14890128)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	20	11045 (3104, 39295)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	20	5210 (1481, 18320)
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	14	5 (5, 5)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	14	5 (5, 5)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	24	401782 (153583, 1051084)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	24	645039 (295340, 1408800)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	24	485 (159, 1481)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	24	1124 (299, 4219)

Table 5i. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Underrepresented minority status						
Communities of Color	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	10 (10, 10)
Communities of Color	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	10 (10, 10)
Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	420	5 (5, 5)
Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	420	5 (5, 5)
Communities of Color	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	10 (10, 10)
Communities of Color	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	10 (10, 10)
Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	120	5 (5, 5)
Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	120	5 (5, 6)
Communities of Color	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	73	5 (5, 5)
Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	73	5 (5, 5)
Communities of Color	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	111	10 (10, 10)
Communities of Color	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	111	10 (10, 10)
Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	111	5 (5, 6)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	111	5 (5, 5)
Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	23355 (19242, 28347)
Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	40216 (34320, 47124)
Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	420	99 (79, 124)
Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	420	208 (163, 266)
Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	44605 (32113, 61955)
Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	90964 (70627, 117156)
Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	120	238 (171, 332)
Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	120	545 (371, 802)
Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	73	5 (5, 5)
Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	73	5 (5, 6)
Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	111	17596 (12331, 25109)
Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	111	18884 (13334, 26743)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	111	54 (34, 84)
Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	111	178 (110, 288)
Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	977894 (775549, 1233031)
Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	2083276 (1732503, 2505069)
Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	420	1903 (1416, 2557)
Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	420	2744 (2021, 3725)
Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	3146770 (2273084, 4356267)
Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	5991417 (4527248, 7929117)
Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	120	7086 (4582, 10956)
Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	120	8885 (5903, 13374)
Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	73	5 (5, 5)
Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	73	5 (5, 5)
Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	111	397884 (256621, 616908)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	111	734879 (489927, 1102301)
Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	111	684 (382, 1222)
Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	111	1409 (809, 2454)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	362	5 (5, 5)
White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	362	5 (5, 5)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	125	5 (5, 5)
White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	125	5 (5, 5)
White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)
White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	67	5 (5, 6)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	121	5 (5, 5)
White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	121	5 (5, 5)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	23438 (18669, 29425)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	40376 (34349, 47460)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	362	115 (90, 147)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	362	188 (146, 241)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	30985 (21434, 44793)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	72481 (53061, 99008)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	125	148 (104, 211)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	125	348 (226, 535)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	67	5 (5, 5)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10931 (7560, 15804)
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	121	18868 (14808, 24043)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	121	52 (37, 74)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	121	107 (76, 150)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	1035293 (809568, 1323956)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	2145772 (1770774, 2600184)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	362	1376 (1010, 1874)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	362	2011 (1465, 2761)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	1943813 (1349835, 2799166)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	4608987 (3338577, 6362819)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	125	4550 (2471, 8378)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	125	7994 (4646, 13757)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	67	5 (5, 5)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	121	393045 (287516, 537306)
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	121	674526 (485396, 937351)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	121	575 (371, 892)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	121	1478 (953, 2292)

Table 5j. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age, Underrepresented minority status						
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	10 (10, 10)
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	10 (10, 10)
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	192	5 (5, 5)
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	192	5 (5, 5)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	10 (10, 10)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	10 (10, 10)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	69	5 (5, 5)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	69	5 (5, 6)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	37	5 (5, 5)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	37	5 (5, 5)
Age < 65 Communities of Color	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)
Age < 65 Communities of Color	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)
Age < 65 Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	61	5 (5, 6)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	61	5 (5, 5)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	17593 (13852, 22344)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	30531 (25113, 37119)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	192	76 (58, 101)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	192	174 (128, 236)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	34937 (23612, 51692)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	70998 (52424, 96153)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	69	209 (141, 310)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	69	484 (305, 768)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	37	5 (5, 5)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	37	5 (5, 6)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	13618 (8923, 20783)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	13717 (9065, 20756)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	61	42 (25, 72)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	61	150 (84, 267)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	741900 (555661, 990562)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	1629402 (1297120, 2046806)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	192	1435 (996, 2067)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	192	2230 (1526, 3260)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	2542683 (1712040, 3776334)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	5081700 (3610831, 7151727)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	69	5550 (3299, 9337)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	69	7380 (4562, 11940)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	37	5 (5, 5)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	37	5 (5, 5)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	61	277278 (163947, 468952)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	61	543679 (333997, 884998)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	61	466 (233, 933)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	61	1073 (554, 2078)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	175	5 (5, 5)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	175	5 (5, 5)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	59	5 (5, 5)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	59	5 (5, 5)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	31	5 (5, 5)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	31	5 (5, 6)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	61	5 (5, 5)
Age < 65 White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	61	5 (5, 5)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	18239 (13758, 24181)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	31442 (25791, 38330)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	175	98 (72, 132)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	175	163 (120, 222)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	19045 (11981, 30275)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	50450 (34089, 74664)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	59	100 (65, 155)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	59	255 (148, 438)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	31	5 (5, 5)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	31	5 (5, 5)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	7844 (4943, 12447)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	13337 (9897, 17972)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	61	38 (25, 58)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	61	78 (51, 118)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	821667 (605817, 1114423)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	1724310 (1360533, 2185355)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	175	1085 (742, 1587)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	175	1624 (1097, 2405)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	1330657 (839177, 2109982)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	3419951 (2265916, 5161739)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	59	2838 (1308, 6159)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	59	6125 (3095, 12121)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	31	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	31	5 (5, 5)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	31	5 (5, 5)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	61	264698 (179593, 390131)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	61	451492 (299075, 681584)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	61	376 (219, 646)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	61	1102 (639, 1903)
Age ≥ 65 Communities of Color	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	10 (10, 10)
Age ≥ 65 Communities of Color	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	10 (10, 10)
Age ≥ 65 Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	228	5 (5, 5)
Age ≥ 65 Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	228	5 (5, 5)
Age ≥ 65 Communities of Color	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)
Age ≥ 65 Communities of Color	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)
Age ≥ 65 Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	51	5 (5, 6)
Age ≥ 65 Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	51	5 (5, 5)
Age ≥ 65 Communities of Color	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Communities of Color	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	36	5 (5, 5)
Age \geq 65 Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	36	5 (5, 5)
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	50	10 (10, 10)
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	50	10 (10, 10)
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	50	5 (5, 5)
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	50	5 (5, 6)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	67566 (54928, 83111)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	113000 (94968, 134457)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	228	263 (208, 334)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	228	409 (322, 520)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	127850 (82403, 198362)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	264698 (193965, 361225)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	51	414 (254, 674)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	51	911 (557, 1491)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	36	5 (5, 5)
Age \geq 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	36	5 (5, 5)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	50	57615 (37847, 87707)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	50	82913 (55530, 123801)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	50	167 (101, 276)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	50	390 (234, 650)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	2754587 (2268630, 3344640)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	5234940 (4335352, 6321193)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	228	5478 (4015, 7473)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	228	5966 (4475, 7954)
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	7886529 (5982602, 10396367)
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	12184499 (9858697, 15058989)
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	51	20307 (11438, 36054)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	51	19769 (10376, 37665)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	36	5 (5, 5)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	36	5 (5, 5)
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	50	2116643 (1388474, 3226693)
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	50	2964324 (2089369, 4205680)
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	50	4026 (2199, 7373)
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	50	4985 (2691, 9234)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	187	5 (5, 5)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	187	5 (5, 5)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	66	5 (5, 6)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	66	5 (5, 5)
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	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 RBD IgG (IU/ml)	60	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	60	5 (5, 5)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	60	5 (5, 5)
Age \geq 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	60501 (48781, 75037)
Age \geq 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	103956 (85919, 125780)
Age \geq 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	187	214 (164, 280)
Age \geq 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	187	317 (243, 412)
Age \geq 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	171330 (122104, 240402)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	258922 (193660, 346179)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	66	575 (355, 932)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	66	1037 (709, 1518)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	36	5 (5, 5)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	36	5 (5, 5)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	60	34684 (23682, 50795)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	60	63090 (45886, 86746)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	60	160 (99, 257)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	60	323 (207, 502)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	2480906 (1963293, 3134986)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	4905828 (4009921, 6001900)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	187	3376 (2393, 4763)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	187	4511 (3339, 6096)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	7361735 (5495760, 9861264)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	13150407 (11178796, 15469753)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	66	23885 (15539, 36713)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	66	20383 (12350, 33642)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	36	5 (5, 5)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	36	5 (5, 6)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	60	1555275 (1070146, 2260326)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	60	2726537 (1931325, 3849174)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	60	2516 (1427, 4435)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	60	4096 (2471, 6792)

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 SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
All participants								
	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	10 (10, 10)	22926 (19863, 26460)	2279.09 (1975.09, 2629.88)
	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	10 (10, 10)	40963 (36741, 45671)	4091.68 (3670.04, 4561.76)
	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	914	5 (5, 5)	106 (91, 125)	21.01 (17.90, 24.67)
	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	914	5 (5, 5)	189 (161, 222)	37.28 (31.71, 43.83)
	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	10 (10, 10)	36133 (28182, 46328)	3613.33 (2818.21, 4632.79)
	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	10 (10, 10)	79981 (65041, 98352)	7998.08 (6504.13, 9835.19)
	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	274	5 (5, 5)	186 (142, 243)	36.50 (27.92, 47.71)
	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	274	5 (5, 5)	420 (314, 560)	82.61 (61.87, 110.32)
	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 11)	10 (10, 10)	0.98 (0.95, 1.02)
	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	163	5 (5, 5)	5 (5, 5)	1.01 (0.99, 1.02)
	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	163	5 (5, 5)	5 (5, 5)	0.99 (0.95, 1.04)
	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	270	10 (10, 10)	12861 (10150, 16296)	1284.22 (1013.60, 1627.09)
	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	270	10 (10, 10)	18191 (15159, 21829)	1819.07 (1515.87, 2182.92)
	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	270	5 (5, 5)	51 (40, 66)	9.99 (7.85, 12.73)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	270	5 (5, 5)	129 (98, 169)	25.46 (19.48, 33.27)
	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	10 (10, 10)	966160 (823437, 1133621)	96047.59 (81866.19, 112685.58)
	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	10 (10, 10)	2087965 (1831068, 2380904)	208560.44 (182899.78, 237821.27)
	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	914	5 (5, 5)	1497 (1228, 1825)	295.67 (242.59, 360.37)
	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	914	5 (5, 5)	2223 (1809, 2733)	438.66 (357.19, 538.72)
	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	10 (10, 10)	2298869 (1785648, 2959596)	229886.89 (178564.83, 295959.65)
	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	10 (10, 10)	5346334 (4339333, 6587023)	534633.43 (433933.34, 658702.34)
	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	274	5 (5, 5)	5680 (3863, 8351)	1114.53 (761.21, 1631.83)
	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	274	5 (5, 5)	7837 (5545, 11076)	1542.78 (1091.92, 2179.81)
	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 11)	10 (10, 10)	0.99 (0.95, 1.02)
	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	163	5 (5, 5)	5 (5, 5)	1.00 (0.99, 1.02)
	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	163	5 (5, 5)	5 (5, 5)	0.99 (0.95, 1.03)
	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	270	10 (10, 10)	382614 (299829, 488256)	38205.28 (29939.10, 48753.76)
	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	270	10 (10, 10)	676872 (531354, 862241)	67687.19 (53135.41, 86224.15)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	270	5 (5, 5)	566 (409, 783)	109.82 (79.77, 151.19)
	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	270	5 (5, 5)	1324 (937, 1870)	261.17 (185.46, 367.79)

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age								
Age < 65	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	10 (10, 10)	17393 (14565, 20770)	1728.59 (1447.96, 2063.60)
Age < 65	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	10 (10, 10)	31397 (27475, 35879)	3139.72 (2747.52, 3587.91)
Age < 65	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	432	5 (5, 5)	85 (69, 103)	16.72 (13.72, 20.38)
Age < 65	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	432	5 (5, 5)	157 (129, 192)	31.07 (25.45, 37.94)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	10 (10, 10)	24939 (18393, 33814)	2493.88 (1839.31, 3381.39)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	10 (10, 10)	59400 (46119, 76506)	5940.04 (4611.93, 7650.60)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	146	5 (5, 5)	144 (104, 198)	28.34 (20.48, 39.21)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	146	5 (5, 5)	339 (238, 482)	66.39 (46.61, 94.58)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	80	10 (10, 11)	10 (10, 10)	0.98 (0.93, 1.02)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	80	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	80	5 (5, 5)	5 (5, 5)	1.00 (0.98, 1.03)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	80	5 (5, 5)	5 (5, 5)	0.99 (0.93, 1.06)
Age < 65	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)	9737 (7318, 12957)	973.73 (731.75, 1295.73)
Age < 65	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)	13380 (10752, 16650)	1337.99 (1075.18, 1665.05)
Age < 65	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	147	5 (5, 5)	40 (29, 54)	7.70 (5.77, 10.28)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	147	5 (5, 5)	106 (76, 147)	20.88 (15.13, 28.82)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	10 (10, 10)	737116 (604473, 898866)	73258.07 (60080.95, 89325.22)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	10 (10, 10)	1643373 (1397160, 1932976)	164337.35 (139715.98, 193297.60)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	432	5 (5, 5)	1136 (890, 1449)	224.61 (176.12, 286.46)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	432	5 (5, 5)	1750 (1355, 2260)	346.17 (268.34, 446.58)
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	10 (10, 10)	1708031 (1250384, 2333179)	170803.11 (125038.42, 233317.89)
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	10 (10, 10)	4266733 (3292306, 5529560)	426673.25 (329230.63, 552956.04)
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	146	5 (5, 5)	4061 (2527, 6527)	801.35 (501.10, 1281.50)
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	146	5 (5, 5)	6238 (4090, 9513)	1223.09 (802.31, 1864.58)
Age < 65	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	80	10 (10, 11)	10 (10, 10)	0.98 (0.93, 1.03)
Age < 65	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	80	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Age < 65	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	80	5 (5, 5)	5 (5, 5)	1.00 (0.98, 1.01)
Age < 65	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	80	5 (5, 5)	5 (5, 5)	0.98 (0.93, 1.03)
Age < 65	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)	270061 (201183, 362521)	27006.13 (20118.30, 36252.12)
Age < 65	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)	484596 (361146, 650244)	48459.60 (36114.65, 65024.40)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	147	5 (5, 5)	387 (262, 572)	75.13 (51.19, 110.26)
Age < 65	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	147	5 (5, 5)	1009 (665, 1531)	199.32 (131.81, 301.41)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	10 (10, 10)	65260 (56734, 75068)	6494.31 (5646.18, 7469.84)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	10 (10, 10)	112166 (98902, 127209)	11156.00 (9843.59, 12643.39)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	482	5 (5, 5)	254 (214, 300)	49.89 (42.15, 59.05)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	482	5 (5, 5)	381 (321, 451)	74.35 (62.85, 87.96)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	10 (10, 10)	158619 (123545, 203649)	15861.86 (12354.53, 20364.88)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	10 (10, 10)	262073 (211994, 323982)	26207.29 (21199.35, 32398.25)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	128	5 (5, 5)	522 (373, 731)	100.15 (72.09, 139.12)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	128	5 (5, 5)	988 (733, 1331)	197.60 (146.66, 266.24)
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	83	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	83	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	83	5 (5, 5)	5 (5, 5)	1.02 (0.99, 1.04)
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	83	5 (5, 5)	5 (5, 5)	1.00 (0.98, 1.03)
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)	41836 (32047, 54614)	4151.56 (3184.55, 5412.22)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)	66891 (53117, 84238)	6689.12 (5311.68, 8423.77)
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	123	5 (5, 5)	156 (112, 216)	30.24 (21.85, 41.85)
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	123	5 (5, 5)	301 (219, 413)	59.03 (43.06, 80.92)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	10 (10, 10)	2692372 (2329146, 3112243)	267928.32 (231855.79, 309613.08)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	10 (10, 10)	5171042 (4536102, 5894857)	514311.17 (451159.38, 586302.75)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	482	5 (5, 5)	4259 (3414, 5312)	837.43 (671.41, 1044.49)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	482	5 (5, 5)	5506 (4535, 6685)	1075.58 (887.15, 1304.01)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	10 (10, 10)	7520373 (6146909, 9200723)	752037.26 (614690.86, 920072.32)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	10 (10, 10)	13148461 (11661345, 14825221)	1314846.07 (1166134.50, 1482522.12)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	128	5 (5, 5)	21658 (15437, 30385)	4155.93 (2979.90, 5796.08)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	128	5 (5, 5)	19480 (13318, 28494)	3896.02 (2663.58, 5698.73)
Age ≥ 65	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	83	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)	83	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	83	5 (5, 5)	5 (5, 5)	1.02 (0.99, 1.05)
Age ≥ 65	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	83	5 (5, 5)	5 (5, 5)	1.01 (0.97, 1.05)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)	1675605 (1276999, 2198632)	166277.45 (126741.57, 218146.20)
Age ≥ 65	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)	2790960 (2209589, 3525298)	279096.04 (220958.92, 352529.78)
Age ≥ 65	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	123	5 (5, 5)	2827 (1887, 4233)	549.05 (368.08, 818.99)
Age ≥ 65	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	123	5 (5, 5)	4185 (2859, 6127)	821.36 (562.39, 1199.58)

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 SARS-CoV-2	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 RBD IgG (IU/ml)	469	10 (10, 10)	26276 (22610, 30535)	2615.50 (2250.98, 3039.05)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	10 (10, 10)	45842 (40067, 52448)	4565.75 (3992.37, 5221.47)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	469	5 (5, 5)	103 (87, 122)	20.04 (16.98, 23.65)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	469	5 (5, 5)	215 (180, 258)	42.59 (35.64, 50.91)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	55528 (43641, 70653)	5552.80 (4364.10, 7065.28)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	103862 (82479, 130788)	10386.18 (8247.90, 13078.81)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	125	5 (5, 5)	220 (161, 302)	43.07 (31.58, 58.75)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	125	5 (5, 5)	443 (318, 617)	87.77 (62.95, 122.37)
At-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	84	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	84	10 (10, 11)	10 (10, 10)	0.98 (0.94, 1.02)
At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	84	5 (5, 5)	5 (5, 5)	1.02 (0.96, 1.08)
At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	84	5 (5, 5)	5 (5, 5)	1.00 (0.98, 1.02)
At-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)	16713 (12642, 22096)	1661.32 (1257.58, 2194.67)
At-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)	26705 (21285, 33505)	2670.50 (2128.48, 3350.54)
At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	123	5 (5, 5)	69 (52, 93)	13.57 (10.16, 18.12)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	123	5 (5, 5)	180 (133, 243)	35.50 (26.16, 48.18)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	10 (10, 10)	1142597 (961925, 1357205)	113734.61 (95775.71, 135060.99)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	10 (10, 10)	2144439 (1840509, 2498559)	213582.55 (183324.98, 248834.09)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	469	5 (5, 5)	1796 (1424, 2264)	349.12 (277.06, 439.92)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	469	5 (5, 5)	2766 (2265, 3377)	546.96 (448.44, 667.12)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	2930270 (2216035, 3874704)	293027.00 (221603.54, 387470.44)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	6396516 (5214355, 7846688)	639651.59 (521435.48, 784668.81)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	125	5 (5, 5)	6128 (4355, 8625)	1197.37 (852.46, 1681.83)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	125	5 (5, 5)	11182 (7684, 16271)	2214.72 (1523.03, 3220.55)
At-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	84	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.04)
At-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	84	10 (10, 11)	10 (10, 10)	0.98 (0.94, 1.02)
At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	84	5 (5, 5)	5 (5, 5)	0.99 (0.96, 1.03)
At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	84	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.07)
At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)	663561 (492320, 894363)	65958.42 (48940.12, 88894.61)
At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)	1012116 (794913, 1288669)	101211.63 (79491.29, 128866.87)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	123	5 (5, 5)	931 (651, 1331)	182.03 (127.42, 260.06)
At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	123	5 (5, 5)	2086 (1418, 3067)	412.34 (280.42, 606.33)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	10 (10, 10)	21736 (17965, 26298)	2159.67 (1785.56, 2612.16)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	10 (10, 10)	39200 (34023, 45165)	3920.03 (3402.34, 4516.49)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	445	5 (5, 5)	108 (87, 133)	21.41 (17.29, 26.50)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	445	5 (5, 5)	180 (145, 223)	35.39 (28.57, 43.84)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	10 (10, 10)	31130 (22510, 43050)	3113.00 (2251.05, 4305.00)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)	73051 (55946, 95386)	7305.09 (5594.58, 9538.58)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	149	5 (5, 5)	175 (124, 247)	34.46 (24.42, 48.63)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	149	5 (5, 5)	412 (284, 597)	80.90 (55.76, 117.37)
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	79	10 (10, 11)	10 (10, 10)	0.97 (0.92, 1.03)
Not at-risk	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)
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	79	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	79	5 (5, 5)	5 (5, 5)	0.99 (0.92, 1.06)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)	11818 (8756, 15950)	1181.77 (875.58, 1595.05)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)	16070 (12770, 20222)	1606.98 (1277.02, 2022.19)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	147	5 (5, 5)	47 (34, 64)	9.06 (6.67, 12.30)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	147	5 (5, 5)	116 (82, 164)	22.87 (16.28, 32.13)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	10 (10, 10)	904842 (732112, 1118324)	89906.29 (72750.39, 111107.87)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	10 (10, 10)	2066294 (1739231, 2454861)	206629.43 (173923.14, 245486.15)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	445	5 (5, 5)	1394 (1075, 1808)	277.07 (213.65, 359.32)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	445	5 (5, 5)	2041 (1549, 2690)	402.41 (305.66, 529.78)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	10 (10, 10)	2113273 (1525010, 2928453)	211327.27 (152501.04, 292845.31)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)	5023873 (3827375, 6594416)	502387.34 (382737.50, 659441.62)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	149	5 (5, 5)	5532 (3337, 9171)	1087.15 (659.48, 1792.15)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	149	5 (5, 5)	6928 (4429, 10838)	1360.94 (870.25, 2128.30)
Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	79	10 (10, 11)	10 (10, 10)	0.97 (0.92, 1.03)
Not at-risk	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)
Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	79	5 (5, 5)	5 (5, 5)	1.01 (1.00, 1.02)
Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	79	5 (5, 5)	5 (5, 5)	0.97 (0.92, 1.03)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)	320294 (235413, 435781)	32029.42 (23541.29, 43578.07)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)	594413 (435730, 810886)	59441.32 (43572.97, 81088.58)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	147	5 (5, 5)	482 (318, 728)	93.28 (62.10, 140.13)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	147	5 (5, 5)	1143 (737, 1774)	225.36 (145.81, 348.33)

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 SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age, Risk for Severe Covid-19								
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	10 (10, 10)	16530 (13368, 20441)	1647.12 (1332.23, 2036.44)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	10 (10, 10)	31028 (25725, 37423)	3102.75 (2572.47, 3742.34)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	214	5 (5, 5)	68 (54, 85)	13.04 (10.42, 16.32)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	214	5 (5, 5)	159 (123, 204)	31.54 (24.49, 40.62)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)	30603 (22501, 41623)	3060.34 (2250.14, 4162.27)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)	62641 (46271, 84801)	6264.08 (4627.13, 8480.14)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	73	5 (5, 5)	142 (95, 213)	28.47 (19.00, 42.66)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	73	5 (5, 5)	291 (187, 453)	57.32 (36.68, 89.56)
Age < 65 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 < 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	40	5 (5, 5)	5 (5, 6)	1.01 (0.92, 1.11)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	40	5 (5, 5)	5 (5, 5)	0.99 (0.96, 1.01)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)	10221 (7219, 14470)	1022.09 (721.94, 1447.04)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	16112 (12299, 21107)	1611.16 (1229.86, 2110.68)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	75	5 (5, 5)	48 (34, 67)	9.40 (6.70, 13.17)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	75	5 (5, 5)	127 (87, 186)	25.12 (17.07, 36.96)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	10 (10, 10)	761200 (595277, 973370)	75848.48 (59325.91, 96972.66)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	10 (10, 10)	1498825 (1211392, 1854460)	149882.51 (121139.16, 185445.96)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	214	5 (5, 5)	1203 (876, 1652)	231.86 (169.01, 318.08)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	214	5 (5, 5)	2067 (1571, 2720)	411.15 (312.79, 540.45)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)	1815884 (1228679, 2683724)	181588.39 (122867.87, 268372.40)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)	4547755 (3405518, 6073108)	454775.50 (340551.75, 607310.79)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	73	5 (5, 5)	2953 (1859, 4690)	590.64 (371.88, 938.10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	73	5 (5, 5)	7954 (4852, 13039)	1567.92 (957.49, 2567.49)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 10)	10 (10, 11)	1.02 (0.98, 1.07)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	40	5 (5, 5)	5 (5, 5)	0.99 (0.93, 1.05)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	40	5 (5, 5)	5 (5, 5)	1.01 (0.96, 1.07)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)	417627 (286526, 608715)	41762.73 (28652.58, 60871.51)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	575539 (423609, 781958)	57553.86 (42360.90, 78195.85)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	75	5 (5, 5)	502 (325, 776)	98.87 (64.02, 152.71)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	75	5 (5, 5)	1382 (851, 2245)	273.33 (168.28, 443.96)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	10 (10, 10)	17639 (14174, 21953)	1751.83 (1408.13, 2179.42)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	10 (10, 10)	31500 (26782, 37050)	3150.02 (2678.20, 3704.97)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	218	5 (5, 5)	90 (70, 115)	17.91 (14.03, 22.88)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	218	5 (5, 5)	157 (122, 200)	30.94 (24.21, 39.54)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)	23567 (16129, 34434)	2356.67 (1612.92, 3443.37)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)	58534 (42846, 79967)	5853.44 (4284.64, 7996.66)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	73	5 (5, 5)	144 (97, 214)	28.30 (18.99, 42.19)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	73	5 (5, 5)	353 (229, 545)	69.15 (44.78, 106.78)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
Age < 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)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	40	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	40	5 (5, 6)	5 (5, 5)	0.99 (0.91, 1.08)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)	9616 (6788, 13622)	961.58 (678.78, 1362.18)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	12751 (9770, 16642)	1275.09 (976.97, 1664.19)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	72	5 (5, 5)	38 (26, 55)	7.31 (5.13, 10.41)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	72	5 (5, 5)	101 (68, 150)	19.90 (13.43, 29.49)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	10 (10, 10)	730590 (572430, 932450)	72557.28 (56856.08, 92594.47)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	10 (10, 10)	1685764 (1382036, 2056240)	168576.35 (138203.64, 205624.01)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	218	5 (5, 5)	1118 (830, 1506)	222.65 (165.28, 299.92)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	218	5 (5, 5)	1671 (1216, 2295)	330.08 (240.60, 452.85)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)	1679359 (1144789, 2463552)	167935.92 (114478.90, 246355.20)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)	4192147 (3040678, 5779665)	419214.74 (304067.80, 577966.50)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	73	5 (5, 5)	4435 (2453, 8017)	871.87 (485.49, 1565.77)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	73	5 (5, 5)	5833 (3464, 9821)	1141.93 (678.45, 1922.04)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
Age < 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 < 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	40	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	40	5 (5, 6)	5 (5, 5)	0.97 (0.90, 1.03)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)	241209 (168681, 344922)	24120.91 (16868.12, 34492.19)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	463469 (322830, 665378)	46346.93 (32282.95, 66537.83)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	72	5 (5, 5)	362 (224, 583)	69.97 (43.74, 111.92)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	72	5 (5, 5)	930 (559, 1549)	183.66 (110.80, 304.42)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	10 (10, 10)	54232 (44615, 65922)	5389.56 (4435.12, 6549.39)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	10 (10, 10)	84391 (70325, 101269)	8352.45 (6975.06, 10001.82)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	255	5 (5, 5)	199 (157, 252)	39.22 (30.90, 49.78)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	255	5 (5, 5)	348 (276, 438)	68.12 (54.16, 85.68)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)	188670 (129392, 275106)	18867.03 (12939.21, 27510.55)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)	293282 (210942, 407763)	29328.19 (21094.20, 40776.26)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	52	5 (5, 6)	541 (337, 870)	100.78 (63.88, 159.01)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	52	5 (5, 5)	1052 (680, 1627)	210.47 (136.09, 325.50)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	44	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	44	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	44	5 (5, 5)	5 (5, 5)	1.03 (0.99, 1.08)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	44	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.06)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	48	10 (10, 11)	48060 (30237, 76388)	4715.92 (2980.60, 7461.57)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	48	10 (10, 10)	79058 (52125, 119908)	7905.78 (5212.45, 11990.78)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	48	5 (5, 5)	155 (89, 270)	29.89 (17.24, 51.82)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	48	5 (5, 5)	378 (233, 613)	74.62 (45.91, 121.29)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	10 (10, 10)	2156196 (1736284, 2677662)	214282.06 (172705.04, 265868.34)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	10 (10, 10)	3754377 (3053564, 4616033)	371583.87 (302329.22, 456702.71)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	255	5 (5, 5)	3359 (2423, 4656)	662.04 (477.45, 917.99)

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Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	255	5 (5, 5)	4361 (3299, 5763)	854.58 (648.16, 1126.74)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)	7826271 (5853680, 10463591)	782627.11 (585368.05, 1046359.11)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)	12884976 (10641883, 15600868)	1288497.62 (1064188.30, 1560086.81)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	52	5 (5, 6)	27431 (17819, 42227)	5108.47 (3366.93, 7750.83)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	52	5 (5, 5)	22502 (13237, 38254)	4500.48 (2647.36, 7650.76)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	44	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)	44	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	44	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	44	5 (5, 5)	5 (5, 6)	1.04 (0.97, 1.11)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	48	10 (10, 11)	1793880 (1112795, 2891824)	176025.95 (109237.32, 283649.72)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	48	10 (10, 10)	3402410 (2325361, 4978321)	340240.98 (232536.09, 497832.07)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	48	5 (5, 5)	3501 (1863, 6577)	675.29 (361.89, 1260.11)

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Group	Visit	Arm	Baseline SARS-CoV-2	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	48	5 (5, 5)	5048 (2709, 9408)	997.20 (534.99, 1858.76)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	10 (10, 10)	80069 (65707, 97571)	7979.90 (6548.33, 9724.45)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	10 (10, 10)	153593 (130667, 180543)	15359.34 (13066.69, 18054.25)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	227	5 (5, 5)	332 (263, 418)	65.09 (51.60, 82.12)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	227	5 (5, 5)	421 (328, 540)	81.90 (63.99, 104.83)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	10 (10, 10)	139826 (99996, 195520)	13982.56 (9999.60, 19552.00)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	10 (10, 10)	241494 (182978, 318724)	24149.39 (18297.76, 31872.38)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	76	5 (5, 5)	508 (317, 815)	99.68 (62.60, 158.74)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	76	5 (5, 5)	944 (626, 1422)	188.75 (125.29, 284.35)
Age ≥ 65 Not 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 ≥ 65 Not 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)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	39	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)

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Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	39	5 (5, 5)	5 (5, 5)	0.99 (0.96, 1.01)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)	38048 (27669, 52321)	3804.83 (2766.90, 5232.12)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	59664 (45819, 77691)	5966.37 (4581.94, 7769.08)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	75	5 (5, 5)	156 (105, 232)	30.49 (20.53, 45.27)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	75	5 (5, 5)	257 (170, 390)	50.29 (33.38, 75.76)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	10 (10, 10)	3441017 (2860842, 4138850)	342939.68 (285103.95, 412507.88)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	10 (10, 10)	7365218 (6408010, 8465410)	736521.80 (640801.04, 846541.01)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	227	5 (5, 5)	5534 (4137, 7404)	1085.68 (812.27, 1451.14)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	227	5 (5, 5)	7125 (5468, 9285)	1386.74 (1065.57, 1804.72)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	10 (10, 10)	7305563 (5522547, 9664247)	730556.35 (552254.70, 966424.70)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	10 (10, 10)	13343347 (11421210, 15588971)	1334334.72 (1142121.04, 1558897.08)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	76	5 (5, 5)	18240 (11134, 29880)	3577.07 (2192.53, 5835.90)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	76	5 (5, 5)	17541 (10280, 29932)	3508.28 (2056.01, 5986.35)
Age ≥ 65 Not 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 Not 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 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	39	5 (5, 5)	5 (5, 6)	1.05 (0.98, 1.11)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	39	5 (5, 5)	5 (5, 5)	0.99 (0.96, 1.01)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)	1599200 (1156266, 2211811)	159920.02 (115626.58, 221181.10)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	2437171 (1815977, 3270859)	243717.12 (181597.68, 327085.88)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	75	5 (5, 5)	2442 (1442, 4134)	476.56 (282.81, 803.04)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	75	5 (5, 5)	3681 (2278, 5949)	719.25 (447.61, 1155.75)

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Sex								
Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	10 (10, 10)	25738 (20110, 32941)	2547.65 (1992.51, 3257.47)
Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	10 (10, 10)	40290 (34397, 47193)	4021.73 (3433.73, 4710.40)
Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	395	5 (5, 5)	121 (93, 157)	23.94 (18.44, 31.08)
Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	395	5 (5, 5)	207 (158, 272)	41.19 (31.36, 54.12)
Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	43301 (30763, 60949)	4330.07 (3076.26, 6094.90)
Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	83762 (65541, 107048)	8376.20 (6554.14, 10704.79)
Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	121	5 (5, 5)	223 (158, 315)	44.26 (31.35, 62.49)
Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	121	5 (5, 5)	449 (303, 666)	88.19 (59.60, 130.49)
Male	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	76	11 (9, 12)	10 (10, 10)	0.95 (0.85, 1.05)
Male	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)
Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	76	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.07)
Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	76	5 (5, 5)	5 (5, 5)	1.00 (0.99, 1.00)
Male	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	115	10 (10, 10)	12838 (8743, 18852)	1283.80 (874.26, 1885.18)
Male	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	115	10 (10, 10)	16359 (12044, 22219)	1635.88 (1204.42, 2221.91)
Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	115	5 (5, 5)	43 (29, 63)	8.45 (5.76, 12.39)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	115	5 (5, 5)	100 (68, 146)	19.80 (13.54, 28.93)
Male	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	10 (10, 10)	1032572 (803692, 1326633)	102207.86 (79582.66, 131265.36)
Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	10 (10, 10)	2448348 (1992531, 3008439)	244392.84 (198889.12, 300307.33)
Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	395	5 (5, 5)	1983 (1427, 2754)	392.99 (282.86, 546.00)
Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	395	5 (5, 5)	2322 (1694, 3181)	461.27 (336.67, 631.96)
Male	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	2628794 (1842173, 3751308)	262879.40 (184217.30, 375130.79)
Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	5518909 (4222583, 7213204)	551890.89 (422258.33, 721320.40)
Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	121	5 (5, 5)	5567 (3235, 9581)	1105.10 (642.29, 1901.37)
Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	121	5 (5, 5)	9590 (6259, 14696)	1881.91 (1235.71, 2866.05)
Male	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	76	11 (9, 12)	10 (10, 10)	0.96 (0.86, 1.07)
Male	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)
Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	76	5 (5, 5)	5 (5, 5)	1.01 (0.99, 1.02)
Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	76	5 (5, 5)	5 (5, 5)	1.00 (0.99, 1.00)
Male	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	115	10 (10, 10)	361345 (243436, 536364)	36134.52 (24343.59, 53636.45)
Male	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	115	10 (10, 10)	578439 (406742, 822616)	57843.93 (40674.16, 82261.55)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	115	5 (5, 5)	606 (358, 1023)	120.00 (71.07, 202.60)
Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	115	5 (5, 5)	930 (554, 1559)	184.20 (109.85, 308.87)
Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	10 (10, 10)	21234 (17837, 25278)	2116.93 (1778.05, 2520.39)
Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	10 (10, 10)	41415 (35725, 48012)	4138.70 (3570.16, 4797.78)
Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	519	5 (5, 5)	98 (80, 120)	19.27 (15.73, 23.62)
Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	519	5 (5, 5)	178 (145, 218)	34.90 (28.55, 42.66)
Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	10 (10, 10)	32117 (22658, 45526)	3211.74 (2265.79, 4552.63)
Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	10 (10, 10)	77611 (57216, 105276)	7761.12 (5721.63, 10527.59)
Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	153	5 (5, 5)	165 (113, 242)	32.19 (21.92, 47.27)
Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	153	5 (5, 5)	401 (268, 602)	79.18 (52.69, 118.97)
Female	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Female	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)	10 (10, 10)	0.99 (0.97, 1.01)
Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	87	5 (5, 5)	5 (5, 5)	1.00 (0.98, 1.01)
Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	87	5 (5, 6)	5 (5, 5)	0.99 (0.92, 1.07)
Female	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	155	10 (10, 10)	12876 (9489, 17472)	1284.49 (946.73, 1742.74)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	155	10 (10, 10)	19468 (15496, 24459)	1946.81 (1549.59, 2445.85)
Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	155	5 (5, 5)	58 (42, 81)	11.13 (8.13, 15.24)
Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	155	5 (5, 5)	152 (105, 219)	29.90 (20.91, 42.76)
Female	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	10 (10, 10)	924524 (750510, 1138886)	92171.55 (74822.64, 113543.10)
Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	10 (10, 10)	1878895 (1586011, 2225864)	187761.05 (158494.70, 222431.47)
Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	519	5 (5, 5)	1243 (972, 1588)	244.86 (191.72, 312.74)
Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	519	5 (5, 5)	2160 (1643, 2840)	424.30 (323.30, 556.85)
Female	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	10 (10, 10)	2106655 (1490680, 2977161)	210665.51 (149068.03, 297716.12)
Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	10 (10, 10)	5236885 (3880756, 7066912)	523688.47 (388075.59, 706691.20)
Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	153	5 (5, 5)	5754 (3356, 9868)	1120.71 (659.00, 1905.91)
Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	153	5 (5, 5)	6872 (4174, 11314)	1355.55 (821.91, 2235.68)
Female	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	87	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)	87	10 (10, 10)	10 (10, 10)	0.99 (0.97, 1.01)
Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	87	5 (5, 5)	5 (5, 5)	1.00 (0.98, 1.02)
Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	87	5 (5, 6)	5 (5, 5)	0.98 (0.92, 1.04)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Female	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	155	10 (10, 10)	396863 (289955, 543189)	39591.01 (28926.67, 54186.94)
Female	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	155	10 (10, 10)	748414 (540245, 1036794)	74841.37 (54024.52, 103679.41)
Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	155	5 (5, 5)	541 (355, 825)	103.77 (68.77, 156.56)
Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	155	5 (5, 5)	1659 (1064, 2588)	326.50 (210.44, 506.55)

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 SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age, sex								
Age < 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	10 (10, 10)	16543 (13418, 20396)	1649.23 (1337.49, 2033.63)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	10 (10, 10)	32705 (27399, 39039)	3270.52 (2739.91, 3903.89)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	269	5 (5, 5)	79 (62, 101)	15.62 (12.24, 19.92)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	269	5 (5, 5)	150 (118, 191)	29.60 (23.28, 37.64)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	10 (10, 10)	21789 (14248, 33321)	2178.91 (1424.83, 3332.11)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	10 (10, 10)	56962 (39317, 82526)	5696.22 (3931.72, 8252.62)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	79	5 (5, 5)	124 (78, 197)	24.32 (15.30, 38.67)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	79	5 (5, 5)	319 (195, 522)	62.74 (38.25, 102.90)
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)	10 (10, 10)	0.99 (0.97, 1.01)
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	52	5 (5, 5)	5 (5, 5)	0.99 (0.97, 1.01)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	52	5 (5, 6)	5 (5, 5)	0.99 (0.90, 1.08)
Age < 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	83	10 (10, 10)	10100 (6984, 14608)	1010.05 (698.40, 1460.75)
Age < 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	83	10 (10, 10)	14961 (11369, 19689)	1496.11 (1136.86, 1968.90)
Age < 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	83	5 (5, 6)	46 (31, 69)	8.74 (6.00, 12.74)
Age < 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	83	5 (5, 5)	133 (86, 207)	26.17 (16.99, 40.31)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	10 (10, 10)	725439 (563976, 933126)	72323.27 (56225.78, 93029.48)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	10 (10, 10)	1494002 (1218429, 1831901)	149400.21 (121842.92, 183190.15)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	269	5 (5, 5)	946 (706, 1267)	186.45 (139.19, 249.76)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	269	5 (5, 5)	1691 (1216, 2352)	332.97 (239.88, 462.17)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	10 (10, 10)	1557246 (1019727, 2378101)	155724.56 (101972.70, 237810.10)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	10 (10, 10)	4234642 (2930914, 6118296)	423464.24 (293091.36, 611829.57)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	79	5 (5, 5)	4195 (2173, 8100)	820.85 (429.44, 1568.99)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	79	5 (5, 5)	5422 (2964, 9918)	1066.04 (581.49, 1954.38)
Age < 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	52	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)	52	10 (10, 10)	10 (10, 10)	0.99 (0.97, 1.01)
Age < 65 Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	52	5 (5, 5)	5 (5, 5)	1.00 (0.97, 1.02)
Age < 65 Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	52	5 (5, 6)	5 (5, 5)	0.97 (0.90, 1.04)
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	83	10 (10, 10)	293632 (201048, 428852)	29363.18 (20104.77, 42885.16)
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	83	10 (10, 10)	571578 (384900, 848795)	57157.76 (38489.96, 84879.54)
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	83	5 (5, 6)	387 (233, 641)	73.68 (45.02, 120.60)
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	83	5 (5, 5)	1375 (804, 2349)	270.38 (159.26, 459.03)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 10)	18877 (13705, 26001)	1866.53 (1356.91, 2567.57)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)	29372 (24030, 35901)	2937.19 (2402.98, 3590.15)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	163	5 (5, 5)	94 (67, 132)	18.70 (13.35, 26.21)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	163	5 (5, 5)	169 (118, 240)	33.64 (23.62, 47.90)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	10 (10, 10)	30884 (20281, 47031)	3088.44 (2028.11, 4703.13)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	10 (10, 10)	63477 (47023, 85688)	6347.70 (4702.33, 8568.81)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	67	5 (5, 5)	180 (119, 274)	36.09 (23.79, 54.76)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	67	5 (5, 5)	372 (229, 604)	72.62 (44.83, 117.63)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	28	11 (9, 13)	10 (10, 10)	0.92 (0.78, 1.08)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	28	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	28	5 (5, 5)	5 (5, 5)	1.03 (0.97, 1.10)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	28	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	64	10 (10, 10)	9188 (5784, 14598)	918.85 (578.36, 1459.77)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	64	10 (10, 10)	11210 (7775, 16161)	1120.96 (777.52, 1616.12)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	64	5 (5, 5)	31 (20, 50)	6.29 (3.99, 9.92)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	64	5 (5, 5)	73 (47, 115)	14.60 (9.30, 22.92)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 10)	756600 (546757, 1046981)	74811.32 (54086.35, 103477.74)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)	1920202 (1472176, 2504576)	192020.23 (147217.61, 250457.60)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	163	5 (5, 5)	1532 (1004, 2337)	304.47 (199.53, 464.60)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	163	5 (5, 5)	1850 (1231, 2781)	368.88 (245.44, 554.40)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	10 (10, 10)	1977267 (1268954, 3080952)	197726.73 (126895.40, 308095.19)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	10 (10, 10)	4318054 (3077671, 6058343)	431805.36 (307767.09, 605834.32)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	67	5 (5, 5)	3857 (1960, 7590)	771.41 (392.00, 1518.05)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	67	5 (5, 5)	7789 (4625, 13117)	1520.50 (910.33, 2539.66)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	28	11 (9, 13)	10 (10, 11)	0.94 (0.79, 1.11)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	28	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	28	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	28	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Age < 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	64	10 (10, 10)	236528 (146661, 381460)	23652.81 (14666.14, 38146.03)
Age < 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	64	10 (10, 10)	373064 (243212, 572245)	37306.38 (24321.16, 57224.48)
Age < 65 Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	64	5 (5, 5)	387 (206, 728)	77.48 (41.21, 145.66)
Age < 65 Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	64	5 (5, 5)	618 (331, 1154)	122.95 (65.86, 229.52)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	10 (10, 10)	66467 (53933, 81913)	6600.68 (5356.98, 8133.11)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	10 (10, 10)	105989 (87935, 127749)	10521.42 (8738.17, 12668.58)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	232	5 (5, 5)	259 (203, 330)	50.93 (39.90, 65.01)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	232	5 (5, 5)	390 (306, 496)	76.59 (60.31, 97.27)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	10 (10, 10)	148457 (98119, 224620)	14845.72 (9811.94, 22461.95)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	10 (10, 10)	230231 (167261, 316907)	23023.06 (16726.06, 31690.75)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	54	5 (5, 6)	482 (286, 812)	93.10 (56.09, 154.53)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	54	5 (5, 5)	895 (560, 1432)	179.10 (111.99, 286.42)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	48	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)	48	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	48	5 (5, 5)	5 (5, 5)	1.01 (0.99, 1.04)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	48	5 (5, 5)	5 (5, 5)	0.99 (0.96, 1.01)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)	50082 (30542, 82125)	5008.22 (3054.16, 8212.50)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)	76189 (49115, 118188)	7618.89 (4911.45, 11818.80)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	51	5 (5, 6)	147 (82, 263)	28.06 (15.81, 49.79)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	51	5 (5, 5)	350 (196, 626)	68.37 (38.37, 121.82)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	10 (10, 10)	2674328 (2152728, 3322311)	265580.56 (213995.04, 329601.25)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	10 (10, 10)	5149990 (4231902, 6267253)	511235.06 (419941.28, 622375.80)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	232	5 (5, 5)	4362 (3133, 6074)	858.16 (615.90, 1195.72)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	232	5 (5, 5)	4649 (3501, 6173)	914.10 (689.08, 1212.60)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	10 (10, 10)	7426127 (5296972, 10411111)	742612.73 (529697.25, 1041111.05)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	10 (10, 10)	13502491 (11607977, 15706205)	1350249.15 (1160797.74, 1570620.53)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	54	5 (5, 6)	21221 (12633, 35647)	4098.51 (2451.98, 6850.70)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	54	5 (5, 5)	20477 (11619, 36087)	4095.32 (2323.81, 7217.31)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	48	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)	48	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	48	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.06)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	48	5 (5, 5)	5 (5, 5)	0.99 (0.96, 1.01)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)	2027539 (1259961, 3262731)	202753.90 (125996.11, 326273.11)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)	3447429 (2322804, 5116559)	344742.86 (232280.42, 511655.88)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	51	5 (5, 6)	3730 (1880, 7401)	712.08 (364.28, 1391.96)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	51	5 (5, 5)	4892 (2560, 9348)	954.53 (501.47, 1816.94)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	10 (10, 10)	64209 (53151, 77567)	6401.45 (5299.06, 7733.16)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	10 (10, 10)	117943 (99447, 139878)	11750.53 (9917.62, 13922.19)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	250	5 (5, 5)	249 (197, 315)	48.99 (38.78, 61.89)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	250	5 (5, 5)	373 (294, 474)	72.42 (57.16, 91.75)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	10 (10, 10)	166523 (121761, 227741)	16652.29 (12176.06, 22774.10)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	10 (10, 10)	288235 (216852, 383115)	28823.47 (21685.20, 38311.49)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	74	5 (5, 6)	553 (354, 864)	105.66 (68.26, 163.53)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	74	5 (5, 5)	1062 (720, 1566)	212.40 (144.04, 313.21)
Age ≥ 65 Female	D29 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 Female	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 Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	35	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.07)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	35	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.07)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)	37051 (27449, 50013)	3657.70 (2719.73, 4919.14)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	61265 (47638, 78789)	6126.46 (4763.78, 7878.92)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	72	5 (5, 5)	162 (110, 238)	31.81 (21.63, 46.78)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	72	5 (5, 5)	271 (188, 392)	53.46 (37.23, 76.76)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	10 (10, 10)	2708471 (2228982, 3291105)	270027.12 (222227.95, 328107.44)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	10 (10, 10)	5189777 (4355492, 6183867)	517053.81 (434090.43, 615873.16)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	250	5 (5, 5)	4169 (3097, 5612)	819.46 (609.36, 1102.00)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	250	5 (5, 5)	6397 (4907, 8340)	1242.43 (955.63, 1615.30)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	10 (10, 10)	7590360 (5921961, 9728799)	759036.03 (592196.09, 972879.93)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	10 (10, 10)	12894340 (10799304, 15395807)	1289433.98 (1079930.42, 1539580.67)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	74	5 (5, 6)	21984 (13986, 34558)	4198.62 (2698.65, 6532.30)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	74	5 (5, 5)	18779 (11189, 31518)	3755.84 (2237.83, 6303.56)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Female	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 Female	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)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	35	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.07)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	35	5 (5, 5)	5 (5, 6)	1.04 (0.96, 1.13)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)	1473236 (1067157, 2033836)	145438.84 (105433.61, 200623.47)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	2420004 (1820068, 3217693)	242000.40 (182006.75, 321769.35)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	72	5 (5, 5)	2344 (1427, 3849)	460.66 (280.22, 757.28)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	72	5 (5, 5)	3767 (2352, 6032)	742.12 (464.89, 1184.66)

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 SARS-CoV-2	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 RBD IgG (IU/ml)	136	10 (10, 10)	22266 (15847, 31284)	2226.58 (1584.75, 3128.36)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	10 (10, 10)	41773 (31562, 55289)	4177.34 (3156.18, 5528.90)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	136	5 (5, 5)	101 (67, 152)	20.07 (13.32, 30.26)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	136	5 (5, 6)	190 (126, 284)	35.82 (24.42, 52.53)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	10 (10, 10)	57339 (30559, 107588)	5733.92 (3055.89, 10758.85)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	10 (10, 10)	90332 (50343, 162084)	9033.16 (5034.32, 16208.37)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	35	5 (5, 5)	254 (155, 417)	50.85 (31.04, 83.31)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	35	5 (5, 5)	498 (236, 1049)	97.19 (45.87, 205.93)
Hispanic or Latino	D29 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	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)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	20	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.05)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	20	5 (5, 5)	6 (4, 8)	1.21 (0.87, 1.67)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	38	10 (10, 10)	34815 (16110, 75239)	3481.54 (1611.02, 7523.86)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	38	10 (10, 10)	26708 (12585, 56680)	2670.83 (1258.52, 5668.01)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	38	6 (5, 7)	118 (42, 327)	21.01 (8.52, 51.83)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	38	5 (5, 5)	351 (151, 818)	70.21 (30.13, 163.62)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	10 (10, 10)	1087406 (737091, 1604213)	108740.60 (73709.14, 160421.34)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	10 (10, 10)	2082654 (1564176, 2772993)	208265.41 (156417.59, 277299.26)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	136	5 (5, 5)	1727 (1013, 2946)	344.71 (202.11, 587.93)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	136	5 (5, 6)	2444 (1373, 4350)	461.92 (266.06, 801.97)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	10 (10, 10)	2735111 (1368395, 5466868)	273511.13 (136839.49, 546686.78)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	10 (10, 10)	7578287 (5040721, 11393296)	757828.67 (504072.13, 1139329.58)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	35	5 (5, 5)	7727 (2908, 20532)	1545.45 (581.63, 4106.42)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	35	5 (5, 5)	10208 (4492, 23195)	1991.90 (877.85, 4519.79)
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	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 RBD IgG (IU/ml)	38	10 (10, 10)	747435 (391924, 1425424)	74743.46 (39192.45, 142542.38)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	38	10 (10, 10)	1403460 (609038, 3234119)	140346.03 (60903.77, 323411.95)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	38	6 (5, 7)	1522 (466, 4976)	271.27 (88.81, 828.62)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	38	5 (5, 5)	3063 (1057, 8877)	612.54 (211.34, 1775.33)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	10 (10, 10)	23020 (19425, 27280)	2286.61 (1930.10, 2708.97)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	10 (10, 10)	39694 (35055, 44946)	3963.68 (3500.65, 4487.96)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	690	5 (5, 5)	104 (86, 125)	20.56 (17.07, 24.76)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	690	5 (5, 5)	191 (158, 230)	37.96 (31.48, 45.77)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	10 (10, 10)	35344 (26390, 47337)	3534.42 (2639.00, 4733.66)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	10 (10, 10)	83383 (65546, 106075)	8338.33 (6554.59, 10607.48)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	217	5 (5, 5)	183 (133, 251)	36.13 (26.25, 49.73)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	217	5 (5, 5)	411 (294, 575)	80.81 (57.70, 113.17)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	130	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)	130	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	130	5 (5, 5)	5 (5, 5)	1.01 (0.98, 1.03)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	130	5 (5, 5)	5 (5, 5)	0.97 (0.93, 1.02)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	214	10 (10, 10)	11608 (9046, 14896)	1158.76 (903.07, 1486.86)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	214	10 (10, 10)	18056 (14910, 21865)	1805.57 (1490.99, 2186.53)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	214	5 (5, 5)	48 (37, 63)	9.40 (7.28, 12.15)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	214	5 (5, 5)	123 (92, 165)	24.28 (18.23, 32.35)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	10 (10, 10)	987977 (822264, 1187086)	98137.11 (81690.28, 117895.20)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	10 (10, 10)	2063432 (1775937, 2397468)	206047.30 (177339.03, 239402.97)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	690	5 (5, 5)	1500 (1191, 1888)	296.84 (235.74, 373.77)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	690	5 (5, 5)	2270 (1788, 2883)	451.12 (355.29, 572.80)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	10 (10, 10)	2315554 (1731123, 3097290)	231555.38 (173112.28, 309728.99)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	10 (10, 10)	5301268 (4150604, 6770929)	530126.82 (415060.39, 677092.90)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	217	5 (5, 5)	5224 (3348, 8151)	1034.14 (662.98, 1613.08)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	217	5 (5, 5)	7937 (5300, 11886)	1561.42 (1043.13, 2337.23)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	130	10 (10, 10)	10 (10, 10)	1.01 (1.00, 1.02)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	130	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	130	5 (5, 5)	5 (5, 5)	1.00 (0.99, 1.02)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	130	5 (5, 5)	5 (5, 5)	0.98 (0.93, 1.03)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	214	10 (10, 10)	381696 (293138, 497006)	38101.89 (29262.14, 49612.02)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	214	10 (10, 10)	648311 (505732, 831086)	64831.06 (50573.21, 83108.56)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	214	5 (5, 5)	555 (395, 782)	108.64 (77.40, 152.49)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	214	5 (5, 5)	1324 (921, 1904)	261.10 (182.28, 374.00)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	10 (10, 10)	22876 (15904, 32905)	2274.83 (1582.12, 3270.83)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	10 (10, 10)	50488 (35885, 71034)	5048.79 (3588.47, 7103.37)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	88	5 (5, 5)	133 (84, 213)	25.71 (16.13, 40.96)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	88	5 (5, 5)	174 (106, 287)	34.02 (20.65, 56.04)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	10 (10, 10)	25827 (18334, 36382)	2582.70 (1833.44, 3638.16)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	10 (10, 10)	46903 (33825, 65038)	4690.32 (3382.48, 6503.83)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	22	6 (4, 7)	154 (91, 259)	27.15 (16.58, 44.47)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	22	5 (5, 5)	420 (198, 891)	83.98 (39.57, 178.24)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	13	12 (8, 18)	10 (10, 10)	0.82 (0.56, 1.21)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	13	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	13	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	18	10 (10, 10)	10750 (3611, 32001)	1075.02 (361.13, 3200.07)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	18	10 (10, 10)	11909 (5649, 25107)	1190.89 (564.87, 2510.66)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	18	5 (5, 5)	37 (15, 93)	7.39 (2.93, 18.63)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	18	5 (5, 5)	58 (19, 177)	11.28 (3.70, 34.45)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	10 (10, 10)	735710 (462524, 1170251)	73159.15 (46013.55, 116319.24)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	10 (10, 10)	2279592 (1446853, 3591615)	227959.19 (144685.30, 359161.52)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	88	5 (5, 5)	1291 (765, 2178)	248.75 (147.56, 419.33)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	88	5 (5, 5)	1748 (990, 3088)	341.31 (194.13, 600.06)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	10 (10, 10)	1751283 (872333, 3515850)	175128.31 (87233.31, 351585.01)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	10 (10, 10)	3840709 (2197166, 6713669)	384070.92 (219716.64, 671366.86)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	22	6 (4, 7)	8669 (2979, 25223)	1531.30 (641.99, 3652.47)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	22	5 (5, 5)	5104 (2140, 12175)	1020.81 (427.96, 2434.92)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	13	12 (8, 18)	10 (10, 10)	0.82 (0.56, 1.21)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	13	5 (5, 5)	5 (5, 5)	1.03 (0.97, 1.08)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	13	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	18	10 (10, 10)	162620 (55659, 475135)	16262.02 (5565.86, 47513.49)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	18	10 (10, 10)	417076 (107739, 1614570)	41707.62 (10773.92, 161457.03)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	18	5 (5, 5)	188 (46, 766)	37.59 (9.22, 153.25)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	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	18	5 (5, 5)	437 (69, 2773)	85.21 (13.47, 538.99)

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Race								
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)	23438 (18669, 29425)	2343.79 (1866.88, 2942.53)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)	40376 (34349, 47460)	4031.72 (3430.05, 4738.93)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	362	5 (5, 5)	115 (90, 147)	22.83 (17.82, 29.23)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	362	5 (5, 5)	188 (146, 241)	37.41 (29.16, 48.00)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	30985 (21434, 44793)	3098.50 (2143.36, 4479.29)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	72481 (53061, 99008)	7248.12 (5306.15, 9900.82)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	125	5 (5, 5)	148 (104, 211)	29.21 (20.49, 41.65)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	125	5 (5, 5)	348 (226, 535)	69.53 (45.18, 106.99)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	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)	67	10 (10, 10)	10 (10, 10)	0.99 (0.96, 1.01)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)	5 (5, 5)	1.01 (1.00, 1.02)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	67	5 (5, 6)	5 (5, 5)	0.96 (0.89, 1.04)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	10931 (7560, 15804)	1089.81 (753.88, 1575.44)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	18868 (14808, 24043)	1886.83 (1480.76, 2404.27)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	121	5 (5, 5)	52 (37, 74)	10.37 (7.32, 14.70)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	121	5 (5, 5)	107 (76, 150)	21.32 (15.15, 29.99)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)	1035293 (809568, 1323956)	103529.30 (80956.76, 132395.58)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)	2145772 (1770774, 2600184)	214266.04 (176817.71, 259645.59)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	362	5 (5, 5)	1376 (1010, 1874)	273.04 (200.41, 371.99)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	362	5 (5, 5)	2011 (1465, 2761)	400.97 (292.11, 550.40)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	1943813 (1349835, 2799166)	194381.34 (134983.46, 279916.55)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	4608987 (3338577, 6362819)	460898.73 (333857.72, 636281.94)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	125	5 (5, 5)	4550 (2471, 8378)	899.93 (488.90, 1656.55)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	125	5 (5, 5)	7994 (4646, 13757)	1598.88 (929.14, 2751.39)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.03)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	0.99 (0.96, 1.01)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	67	5 (5, 6)	5 (5, 5)	0.98 (0.90, 1.06)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	393045 (287516, 537306)	39187.22 (28666.35, 53569.39)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	674526 (485396, 937351)	67452.65 (48539.56, 93735.08)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	121	5 (5, 5)	575 (371, 892)	114.01 (73.52, 176.80)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	121	5 (5, 5)	1478 (953, 2292)	295.55 (190.57, 458.35)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	10 (10, 11)	18966 (14305, 25146)	1843.84 (1399.25, 2429.70)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	10 (10, 10)	33478 (26923, 41629)	3347.79 (2692.25, 4162.95)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	195	5 (5, 5)	80 (57, 111)	15.88 (11.38, 22.16)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	195	5 (5, 5)	168 (116, 244)	33.41 (23.02, 48.50)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)	49806 (32279, 76849)	4980.58 (3227.90, 7684.92)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)	92510 (63827, 134083)	9251.02 (6382.72, 13408.29)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	52	5 (5, 5)	240 (126, 455)	47.20 (24.97, 89.23)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	52	5 (5, 5)	595 (282, 1255)	116.76 (55.14, 247.22)
Black or African American	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)
Black or African American	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)
Black or African American	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	39	5 (5, 5)	5 (5, 5)	0.97 (0.92, 1.03)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Black or African American	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	39	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Black or African American	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)	13142 (8909, 19387)	1314.25 (890.92, 1938.73)
Black or African American	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)	17281 (11001, 27148)	1728.13 (1100.06, 2714.79)
Black or African American	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	60	5 (5, 6)	44 (24, 81)	8.34 (4.87, 14.28)
Black or African American	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	60	5 (5, 5)	170 (88, 328)	33.37 (17.33, 64.24)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	10 (10, 11)	700976 (482795, 1017755)	68147.28 (47075.98, 98650.13)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	10 (10, 10)	1698222 (1265203, 2279444)	169822.23 (126520.28, 227944.40)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	195	5 (5, 5)	1634 (1060, 2520)	325.53 (211.14, 501.88)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	195	5 (5, 5)	2461 (1568, 3861)	488.47 (311.61, 765.72)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Black or African American	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)	3863173 (2496394, 5978266)	386317.31 (249639.38, 597826.60)
Black or African American	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)	5233980 (3292870, 8319352)	523397.96 (329286.96, 831935.23)
Black or African American	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	52	5 (5, 5)	9353 (5430, 16111)	1839.68 (1070.22, 3162.36)
Black or African American	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	52	5 (5, 5)	10207 (5426, 19200)	2004.31 (1066.53, 3766.66)
Black or African American	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)
Black or African American	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)
Black or African American	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	39	5 (5, 5)	5 (5, 5)	0.99 (0.92, 1.06)
Black or African American	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	39	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Black or African American	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)	304404 (168043, 551417)	30440.40 (16804.30, 55141.74)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Black or African American	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)	604842 (358324, 1020956)	60484.17 (35832.44, 102095.63)
Black or African American	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	60	5 (5, 6)	572 (270, 1213)	107.39 (52.57, 219.36)
Black or African American	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	60	5 (5, 5)	1276 (599, 2723)	250.63 (117.65, 533.90)
Asian	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)	33349 (22259, 49964)	3334.89 (2225.89, 4996.41)
Asian	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)	63758 (45931, 88504)	6375.81 (4593.12, 8850.40)
Asian	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)	144 (92, 225)	28.35 (18.13, 44.32)
Asian	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	67	5 (5, 6)	330 (204, 534)	62.08 (38.25, 100.73)
Asian	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	24	10 (10, 10)	24553 (12536, 48091)	2455.34 (1253.59, 4809.13)
Asian	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	24	10 (10, 10)	49522 (26709, 91821)	4952.19 (2670.86, 9182.14)
Asian	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	24	5 (5, 5)	174 (94, 325)	34.87 (18.71, 64.97)
Asian	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	24	6 (5, 7)	368 (184, 735)	66.35 (30.44, 144.62)
Asian	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)
Asian	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)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Asian	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	12	5 (5, 5)	5 (5, 6)	1.03 (0.97, 1.11)
Asian	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	12	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Asian	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	13	10 (10, 10)	27396 (5431, 138186)	2739.55 (543.12, 13818.59)
Asian	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	13	10 (10, 10)	12500 (4740, 32962)	1250.02 (474.04, 3296.21)
Asian	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	13	5 (5, 5)	65 (17, 245)	12.91 (3.40, 49.02)
Asian	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	13	5 (5, 5)	146 (18, 1215)	29.22 (3.51, 243.00)
Asian	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)	1685637 (1167594, 2433528)	168563.68 (116759.36, 243352.76)
Asian	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)	2633046 (1864450, 3718486)	263304.56 (186444.95, 371848.60)
Asian	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)	2850 (1578, 5149)	562.24 (311.66, 1014.28)
Asian	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	67	5 (5, 6)	3805 (1835, 7889)	715.18 (348.74, 1466.64)
Asian	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	24	10 (10, 10)	2094481 (742718, 5906481)	209448.13 (74271.83, 590648.10)
Asian	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	24	10 (10, 10)	4848443 (2478358, 9485072)	484844.34 (247835.80, 948507.20)
Asian	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	24	5 (5, 5)	6020 (2360, 15360)	1204.08 (471.94, 3072.01)
Asian	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	24	6 (5, 7)	8404 (2608, 27081)	1516.02 (420.28, 5468.58)
Asian	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)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Asian	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)
Asian	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	12	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Asian	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	12	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Asian	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	13	10 (10, 10)	750472 (176753, 3186420)	75047.23 (17675.28, 318642.03)
Asian	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	13	10 (10, 10)	859200 (168867, 4371633)	85919.98 (16886.69, 437163.32)
Asian	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	13	5 (5, 5)	482 (269, 862)	96.37 (53.86, 172.43)
Asian	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	13	5 (5, 5)	1167 (203, 6693)	233.34 (40.67, 1338.57)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	10 (10, 10)	42283 (20288, 88120)	4228.26 (2028.84, 8812.00)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)	30785 (13439, 70516)	3078.46 (1343.94, 7051.60)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	13	5 (5, 5)	186 (63, 554)	37.27 (12.54, 110.76)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	13	5 (5, 5)	309 (55, 1753)	61.82 (10.90, 350.55)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	10 (10, 10)	22761 (8134, 63689)	2276.11 (813.43, 6368.93)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	10 (10, 10)	85898 (68138, 108288)	8589.81 (6813.79, 10828.76)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	6	5 (5, 5)	244 (182, 327)	48.86 (36.48, 65.43)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	6	7 (4, 14)	1338 (620, 2888)	189.36 (70.73, 506.98)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	5	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)	5	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	5	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	5	5 (5, 7)	5 (5, 5)	0.92 (0.76, 1.11)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	4	10 (10, 10)	7559 (3837, 14892)	755.89 (383.69, 1489.16)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	4	10 (10, 10)	5348 (1735, 16488)	534.82 (173.48, 1648.79)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	4	5 (5, 5)	13 (4, 46)	2.68 (0.78, 9.17)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	4	5 (5, 5)	79 (32, 190)	15.71 (6.48, 38.08)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	10 (10, 10)	836025 (283249, 2467576)	83602.47 (28324.85, 246757.62)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)	4760602 (2359191, 9606399)	476060.17 (235919.09, 960639.89)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	13	5 (5, 5)	3381 (548, 20856)	676.29 (109.65, 4171.15)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	13	5 (5, 5)	4097 (1137, 14766)	819.48 (227.39, 2953.28)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	10 (10, 10)	2320038 (501453, 10733961)	232003.84 (50145.31, 1073396.08)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	10 (10, 10)	7507181 (3379449, 16676615)	750718.10 (337944.88, 1667661.53)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	6	5 (5, 5)	8919 (1502, 52953)	1783.72 (300.42, 10590.56)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	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	6	7 (4, 14)	9789 (1020, 93964)	1385.06 (263.35, 7284.52)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	5	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)	5	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	5	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	5	5 (5, 7)	5 (5, 5)	0.92 (0.76, 1.11)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	4	10 (10, 10)	272152 (65917, 1123631)	27215.15 (6591.71, 112363.10)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	4	10 (10, 10)	677711 (214540, 2140827)	67771.11 (21453.97, 214082.67)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	4	5 (5, 5)	126 (26, 608)	25.11 (5.18, 121.64)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	4	5 (5, 5)	520 (61, 4436)	104.04 (12.20, 887.23)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	11 (9, 14)	114776 (53301, 247155)	10095.55 (4569.91, 22302.43)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	10 (10, 10)	116196 (67714, 199391)	11619.59 (6771.36, 19939.11)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	17	6 (4, 8)	381 (198, 736)	66.42 (37.70, 117.02)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	17	5 (5, 5)	982 (339, 2849)	196.48 (67.76, 569.73)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)	44998 (2885, 701952)	4499.84 (288.46, 70195.19)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)	107953 (71167, 163752)	10795.26 (7116.74, 16375.16)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	5	5 (5, 5)	227 (17, 2989)	45.50 (3.46, 597.82)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	5	5 (5, 5)	489 (239, 1000)	97.88 (47.90, 200.01)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	1	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)	1	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	Pseudovirus-nAb ID50	1	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	1	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 RBD IgG (IU/ml)	1	10 (10, 10)	6237 (6237, 6237)	623.73 (623.73, 623.73)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	1	10 (10, 10)	10844 (10844, 10844)	1084.43 (1084.43, 1084.43)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	1	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	Pseudovirus-nAb ID80	1	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	11 (9, 14)	5533419 (2490433, 12294540)	486710.15 (203427.87, 1164475.48)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	10 (10, 10)	7662810 (3323463, 17667914)	766281.01 (332346.29, 1766791.43)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	17	6 (4, 8)	10464 (2274, 48150)	1821.72 (378.83, 8760.18)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	17	5 (5, 5)	4635 (2089, 10284)	927.06 (417.84, 2056.86)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)	1828480 (947016, 3530396)	182848.03 (94701.55, 353039.63)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)	5139344 (595014, 44390337)	513934.43 (59501.37, 4439033.72)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	5	5 (5, 5)	2545 (185, 35084)	509.01 (36.92, 7016.90)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	5	5 (5, 5)	1804 (213, 15248)	360.81 (42.69, 3049.51)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	1	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)	1	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	Pseudovirus-nAb ID50	1	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	1	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	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)	1	10 (10, 10)	4780 (4780, 4780)	477.97 (477.97, 477.97)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	1	10 (10, 10)	61376 (61376, 61376)	6137.62 (6137.62, 6137.62)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	1	5 (5, 5)	44 (44, 44)	8.78 (8.78, 8.78)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	1	5 (5, 5)	144 (144, 144)	28.88 (28.88, 28.88)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)	21505 (13701, 33755)	2150.54 (1370.10, 3375.53)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)	45067 (27165, 74765)	4506.67 (2716.51, 7476.53)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	52	5 (5, 5)	71 (38, 130)	14.15 (7.67, 26.10)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	52	5 (5, 5)	135 (82, 222)	27.01 (16.44, 44.37)
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	10 (10, 10)	55196 (16260, 187371)	5519.61 (1625.98, 18737.06)
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	10 (10, 10)	155885 (67996, 357377)	15588.50 (6799.58, 35737.70)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	12	5 (5, 5)	398 (197, 804)	79.65 (39.46, 160.77)
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	12	5 (5, 5)	277 (153, 502)	55.46 (30.62, 100.45)
Multiracial	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	8	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)	8	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Multiracial	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	8	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Multiracial	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	8	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	19	10 (10, 10)	24792 (13458, 45670)	2479.22 (1345.85, 4567.01)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	19	10 (10, 10)	25261 (11298, 56479)	2526.08 (1129.81, 5647.92)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	19	5 (5, 5)	51 (28, 93)	10.28 (5.69, 18.57)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	19	5 (5, 5)	190 (60, 600)	38.04 (12.06, 119.98)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)	1262157 (710446, 2242309)	126215.68 (71044.61, 224230.92)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)	2195866 (1476648, 3265387)	219586.59 (147664.79, 326538.73)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	52	5 (5, 5)	1524 (697, 3334)	304.82 (139.36, 666.71)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	52	5 (5, 5)	1963 (778, 4953)	392.69 (155.66, 990.65)
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	10 (10, 10)	3777504 (1786314, 7988255)	377750.36 (178631.43, 798825.46)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	10 (10, 10)	8118223 (3167974, 20803689)	811822.28 (316797.37, 2080368.91)
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	12	5 (5, 5)	2411 (687, 8455)	482.14 (137.47, 1690.96)
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	12	5 (5, 5)	10135 (6049, 16979)	2026.93 (1209.86, 3395.82)
Multiracial	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	8	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)	8	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Multiracial	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	8	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Multiracial	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	8	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Multiracial	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	19	10 (10, 10)	693982 (285837, 1684912)	69398.16 (28583.71, 168491.21)
Multiracial	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	19	10 (10, 10)	791515 (327732, 1911609)	79151.46 (32773.19, 191160.91)
Multiracial	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	19	5 (5, 5)	1034 (211, 5057)	206.71 (42.25, 1011.44)
Multiracial	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	19	5 (5, 5)	2744 (676, 11140)	548.80 (135.18, 2227.99)
Other	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	10 (10, 10)	22295 (11570, 42963)	2229.51 (1156.96, 4296.34)
Other	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	10 (10, 10)	38007 (21259, 67950)	3800.73 (2125.91, 6794.99)
Other	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	34	5 (5, 5)	118 (54, 259)	23.46 (10.69, 51.49)
Other	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	34	6 (5, 7)	254 (100, 650)	45.07 (19.22, 105.68)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Other	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	10 (10, 10)	18039 (7489, 43449)	1803.88 (748.91, 4344.93)
Other	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	10 (10, 10)	75844 (32129, 179037)	7584.42 (3212.93, 17903.73)
Other	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	7	5 (5, 5)	63 (18, 221)	12.67 (3.62, 44.29)
Other	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	7	5 (5, 5)	283 (86, 936)	56.63 (17.13, 187.20)
Other	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)
Other	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)
Other	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	4	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	4	6 (4, 8)	5 (5, 5)	0.87 (0.67, 1.14)
Other	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)	49870 (993, 2505753)	4987.05 (99.25, 250575.29)
Other	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)	40496 (1871, 876366)	4049.58 (187.13, 87636.61)
Other	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	5	5 (5, 5)	221 (12, 4185)	44.21 (2.34, 836.92)
Other	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	5	5 (5, 5)	295 (27, 3229)	58.92 (5.37, 645.90)
Other	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	10 (10, 10)	959325 (467189, 1969877)	95932.51 (46718.88, 196987.75)
Other	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	10 (10, 10)	2238776 (1221484, 4103302)	223877.62 (122148.43, 410330.20)
Other	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	34	5 (5, 5)	1974 (715, 5452)	392.38 (142.10, 1083.45)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Other	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	34	6 (5, 7)	3391 (1017, 11315)	600.81 (201.25, 1793.66)
Other	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	10 (10, 10)	4612046 (1663462, 12787169)	461204.60 (166346.19, 1278716.85)
Other	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	10 (10, 10)	5745695 (3340937, 9881364)	574569.52 (334093.70, 988136.36)
Other	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	7	5 (5, 5)	2543 (573, 11275)	508.53 (114.67, 2255.10)
Other	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	7	5 (5, 5)	4503 (1467, 13817)	900.51 (293.45, 2763.40)
Other	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)
Other	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)
Other	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	4	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	4	6 (4, 8)	5 (5, 5)	0.87 (0.67, 1.14)
Other	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)	390164 (12362, 12313729)	39016.41 (1236.25, 1231372.90)
Other	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)	1950467 (62864, 60516607)	195046.73 (6286.41, 6051660.72)
Other	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	5	5 (5, 5)	6112 (27, 1395272)	1222.45 (5.36, 279054.32)
Other	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	5	5 (5, 5)	1609 (34, 75283)	321.73 (6.87, 15056.61)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)	19972 (12070, 33047)	1984.44 (1199.39, 3283.33)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)	41499 (27382, 62895)	4133.86 (2728.77, 6262.46)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	87	5 (5, 5)	85 (51, 144)	16.41 (9.71, 27.74)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	87	5 (5, 5)	167 (114, 245)	32.87 (22.41, 48.19)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	10 (10, 10)	57668 (23639, 140684)	5766.80 (2363.88, 14068.40)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	10 (10, 10)	112437 (52711, 239834)	11243.65 (5271.13, 23983.41)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	20	6 (5, 7)	348 (94, 1295)	63.04 (16.08, 247.10)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	20	5 (5, 5)	581 (199, 1695)	116.20 (39.84, 338.93)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	14	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)	14	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	14	5 (5, 5)	5 (5, 6)	1.07 (0.93, 1.23)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	14	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	24	10 (10, 10)	11890 (6465, 21867)	1188.99 (646.49, 2186.73)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	24	10 (10, 10)	17779 (10512, 30069)	1777.89 (1051.21, 3006.90)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	24	6 (5, 7)	46 (19, 111)	8.22 (3.79, 17.84)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	24	5 (5, 6)	168 (59, 476)	31.45 (11.89, 83.22)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)	958206 (602856, 1523015)	95207.62 (59917.16, 151283.72)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)	1898203 (1201387, 2999181)	189087.45 (119691.94, 298717.41)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	87	5 (5, 5)	1331 (758, 2339)	256.28 (146.58, 448.08)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	87	5 (5, 5)	2345 (1156, 4755)	461.94 (227.90, 936.32)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	10 (10, 10)	3239260 (1199389, 8748461)	323926.04 (119938.90, 874846.13)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	10 (10, 10)	9280577 (5784309, 14890128)	928057.68 (578430.93, 1489012.80)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	20	6 (5, 7)	11045 (3104, 39295)	2000.02 (606.29, 6597.67)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	20	5 (5, 5)	5210 (1481, 18320)	1041.90 (296.28, 3663.93)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	14	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)	14	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	14	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.07)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	14	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	24	10 (10, 10)	401782 (153583, 1051084)	40178.22 (15358.33, 105108.37)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	24	10 (10, 10)	645039 (295340, 1408800)	64503.88 (29533.99, 140880.03)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	24	6 (5, 7)	485 (159, 1481)	87.38 (29.73, 256.78)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	24	5 (5, 6)	1124 (299, 4219)	209.99 (58.57, 752.84)

Table 6i. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Underrepresented minority status								
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	10 (10, 10)	23355 (19242, 28347)	2298.01 (1896.26, 2784.86)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	10 (10, 10)	40216 (34320, 47124)	4021.60 (3432.03, 4712.44)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	420	5 (5, 5)	99 (79, 124)	19.66 (15.68, 24.64)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	420	5 (5, 5)	208 (163, 266)	40.35 (31.69, 51.38)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	10 (10, 10)	44605 (32113, 61955)	4460.46 (3211.32, 6195.47)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	10 (10, 10)	90964 (70627, 117156)	9096.36 (7062.72, 11715.57)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	120	5 (5, 5)	238 (171, 332)	47.22 (33.91, 65.75)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	120	5 (5, 6)	545 (371, 802)	103.86 (70.31, 153.42)
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	73	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	73	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	73	5 (5, 5)	5 (5, 5)	0.99 (0.96, 1.02)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	73	5 (5, 5)	5 (5, 6)	1.04 (0.95, 1.15)
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	111	10 (10, 10)	17596 (12331, 25109)	1759.61 (1233.11, 2510.90)
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	111	10 (10, 10)	18884 (13334, 26743)	1888.39 (1333.43, 2674.32)
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	111	5 (5, 6)	54 (34, 84)	10.35 (6.82, 15.71)
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	111	5 (5, 5)	178 (110, 288)	35.18 (21.73, 56.94)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	10 (10, 10)	977894 (775549, 1233031)	96220.17 (76347.07, 121266.24)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	10 (10, 10)	2083276 (1732503, 2505069)	208327.61 (173250.30, 250506.88)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	420	5 (5, 5)	1903 (1416, 2557)	377.51 (280.96, 507.24)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	420	5 (5, 5)	2744 (2021, 3725)	531.46 (393.63, 717.56)
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	10 (10, 10)	3146770 (2273084, 4356267)	314676.99 (227308.38, 435626.74)
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	10 (10, 10)	5991417 (4527248, 7929117)	599141.71 (452724.79, 792911.71)
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	120	5 (5, 5)	7086 (4582, 10956)	1407.15 (910.55, 2174.59)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	120	5 (5, 6)	8885 (5903, 13374)	1691.75 (1126.45, 2540.74)
Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	73	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)	73	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	73	5 (5, 5)	5 (5, 5)	0.99 (0.96, 1.03)
Communities of Color	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	73	5 (5, 5)	5 (5, 5)	0.99 (0.97, 1.01)
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	111	10 (10, 10)	397884 (256621, 616908)	39788.42 (25662.15, 61690.79)
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	111	10 (10, 10)	734879 (489927, 1102301)	73487.92 (48992.72, 110230.12)
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	111	5 (5, 6)	684 (382, 1222)	131.54 (74.79, 231.36)
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	111	5 (5, 5)	1409 (809, 2454)	278.73 (160.13, 485.18)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)	23438 (18669, 29425)	2343.79 (1866.88, 2942.53)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)	40376 (34349, 47460)	4031.72 (3430.05, 4738.93)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	362	5 (5, 5)	115 (90, 147)	22.83 (17.82, 29.23)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	362	5 (5, 5)	188 (146, 241)	37.41 (29.16, 48.00)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	30985 (21434, 44793)	3098.50 (2143.36, 4479.29)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	72481 (53061, 99008)	7248.12 (5306.15, 9900.82)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	125	5 (5, 5)	148 (104, 211)	29.21 (20.49, 41.65)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	125	5 (5, 5)	348 (226, 535)	69.53 (45.18, 106.99)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	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)	67	10 (10, 10)	10 (10, 10)	0.99 (0.96, 1.01)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)	5 (5, 5)	1.01 (1.00, 1.02)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	67	5 (5, 6)	5 (5, 5)	0.96 (0.89, 1.04)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	10931 (7560, 15804)	1089.81 (753.88, 1575.44)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	18868 (14808, 24043)	1886.83 (1480.76, 2404.27)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	121	5 (5, 5)	52 (37, 74)	10.37 (7.32, 14.70)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	121	5 (5, 5)	107 (76, 150)	21.32 (15.15, 29.99)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)	1035293 (809568, 1323956)	103529.30 (80956.76, 132395.58)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)	2145772 (1770774, 2600184)	214266.04 (176817.71, 259645.59)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	362	5 (5, 5)	1376 (1010, 1874)	273.04 (200.41, 371.99)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	362	5 (5, 5)	2011 (1465, 2761)	400.97 (292.11, 550.40)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	1943813 (1349835, 2799166)	194381.34 (134983.46, 279916.55)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	4608987 (3338577, 6362819)	460898.73 (333857.72, 636281.94)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	125	5 (5, 5)	4550 (2471, 8378)	899.93 (488.90, 1656.55)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	125	5 (5, 5)	7994 (4646, 13757)	1598.88 (929.14, 2751.39)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.03)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	0.99 (0.96, 1.01)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	67	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	67	5 (5, 6)	5 (5, 5)	0.98 (0.90, 1.06)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	393045 (287516, 537306)	39187.22 (28666.35, 53569.39)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	674526 (485396, 937351)	67452.65 (48539.56, 93735.08)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	121	5 (5, 5)	575 (371, 892)	114.01 (73.52, 176.80)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	121	5 (5, 5)	1478 (953, 2292)	295.55 (190.57, 458.35)

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age, Underrepresented minority status								
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	10 (10, 10)	17593 (13852, 22344)	1725.89 (1361.64, 2187.59)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	10 (10, 10)	30531 (25113, 37119)	3053.10 (2511.25, 3711.87)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	192	5 (5, 5)	76 (58, 101)	15.18 (11.48, 20.07)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	192	5 (5, 5)	174 (128, 236)	33.64 (24.93, 45.38)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	10 (10, 10)	34937 (23612, 51692)	3493.66 (2361.25, 5169.16)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	10 (10, 10)	70998 (52424, 96153)	7099.81 (5242.39, 9615.33)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	69	5 (5, 5)	209 (141, 310)	41.82 (28.22, 61.98)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	69	5 (5, 6)	484 (305, 768)	91.16 (57.15, 145.40)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Communities of Color	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 Communities of Color	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)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	37	5 (5, 5)	5 (5, 5)	0.98 (0.94, 1.02)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	37	5 (5, 5)	5 (5, 6)	1.05 (0.93, 1.19)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)	13618 (8923, 20783)	1361.81 (892.33, 2078.29)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)	13717 (9065, 20756)	1371.71 (906.53, 2075.61)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	61	5 (5, 6)	42 (25, 72)	8.09 (4.93, 13.29)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	61	5 (5, 5)	150 (84, 267)	30.02 (16.87, 53.39)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	10 (10, 10)	741900 (555661, 990562)	72781.13 (54544.47, 97115.13)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	10 (10, 10)	1629402 (1297120, 2046806)	162940.23 (129711.97, 204680.56)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	192	5 (5, 5)	1435 (996, 2067)	285.33 (198.09, 411.00)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	192	5 (5, 5)	2230 (1526, 3260)	431.29 (297.10, 626.08)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	10 (10, 10)	2542683 (1712040, 3776334)	254268.26 (171204.01, 377633.36)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	10 (10, 10)	5081700 (3610831, 7151727)	508170.01 (361083.05, 715172.74)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	69	5 (5, 5)	5550 (3299, 9337)	1109.99 (659.78, 1867.40)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	69	5 (5, 6)	7380 (4562, 11940)	1389.33 (861.24, 2241.22)
Age < 65 Communities of Color	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 Communities of Color	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)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	37	5 (5, 5)	5 (5, 5)	0.99 (0.95, 1.04)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	37	5 (5, 5)	5 (5, 5)	0.99 (0.97, 1.01)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)	277278 (163947, 468952)	27727.83 (16394.70, 46895.20)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)	543679 (333997, 884998)	54367.88 (33399.71, 88499.76)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	61	5 (5, 6)	466 (233, 933)	89.60 (45.67, 175.78)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	61	5 (5, 5)	1073 (554, 2078)	214.52 (110.72, 415.67)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	10 (10, 10)	18239 (13758, 24181)	1823.94 (1375.79, 2418.07)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	10 (10, 10)	31442 (25791, 38330)	3144.18 (2579.11, 3833.04)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	175	5 (5, 5)	98 (72, 132)	19.42 (14.32, 26.34)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	175	5 (5, 5)	163 (120, 222)	32.68 (24.04, 44.44)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	10 (10, 10)	19045 (11981, 30275)	1904.54 (1198.08, 3027.54)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	10 (10, 10)	50450 (34089, 74664)	5044.99 (3408.87, 7466.38)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	59	5 (5, 5)	100 (65, 155)	20.06 (12.98, 31.00)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	59	5 (5, 5)	255 (148, 438)	50.94 (29.59, 87.68)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	31	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)	31	10 (10, 10)	10 (10, 10)	0.98 (0.95, 1.02)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	31	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	31	5 (5, 6)	5 (5, 5)	0.95 (0.85, 1.05)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)	7844 (4943, 12447)	784.36 (494.26, 1244.74)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)	13337 (9897, 17972)	1333.71 (989.74, 1797.23)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	61	5 (5, 5)	38 (25, 58)	7.54 (4.91, 11.57)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	61	5 (5, 5)	78 (51, 118)	15.51 (10.18, 23.62)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	10 (10, 10)	821667 (605817, 1114423)	82166.69 (60581.70, 111442.32)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	10 (10, 10)	1724310 (1360533, 2185355)	172431.05 (136053.26, 218535.49)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	175	5 (5, 5)	1085 (742, 1587)	215.99 (147.67, 315.94)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	175	5 (5, 5)	1624 (1097, 2405)	324.87 (219.40, 481.06)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	10 (10, 10)	1330657 (839177, 2109982)	133065.71 (83917.71, 210998.18)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	10 (10, 10)	3419951 (2265916, 5161739)	341995.14 (226591.60, 516173.95)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	59	5 (5, 5)	2838 (1308, 6159)	567.69 (261.64, 1231.71)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	59	5 (5, 5)	6125 (3095, 12121)	1224.99 (619.02, 2424.13)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	31	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.03)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	31	10 (10, 10)	10 (10, 10)	0.98 (0.95, 1.02)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	31	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	31	5 (5, 6)	5 (5, 5)	0.96 (0.86, 1.07)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)	264698 (179593, 390131)	26469.79 (17959.33, 39013.14)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)	451492 (299075, 681584)	45149.17 (29907.49, 68158.43)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	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	61	5 (5, 5)	376 (219, 646)	74.74 (43.50, 128.41)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	61	5 (5, 5)	1102 (639, 1903)	220.47 (127.72, 380.58)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	10 (10, 10)	67566 (54928, 83111)	6723.29 (5465.75, 8270.15)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	10 (10, 10)	113000 (94968, 134457)	11300.05 (9496.80, 13445.69)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	228	5 (5, 5)	263 (208, 334)	51.85 (40.91, 65.71)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	228	5 (5, 5)	409 (322, 520)	79.83 (63.06, 101.06)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)	127850 (82403, 198362)	12784.98 (8240.28, 19836.18)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)	264698 (193965, 361225)	26469.82 (19396.51, 36122.55)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	51	5 (5, 6)	414 (254, 674)	79.73 (50.17, 126.69)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	51	5 (5, 5)	911 (557, 1491)	182.23 (111.38, 298.14)
Age ≥ 65 Communities of Color	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 Communities of Color	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 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	36	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.06)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	36	5 (5, 5)	5 (5, 5)	1.01 (0.94, 1.09)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	50	10 (10, 10)	57615 (37847, 87707)	5761.48 (3784.71, 8770.72)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	50	10 (10, 10)	82913 (55530, 123801)	8291.33 (5552.97, 12380.06)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	50	5 (5, 5)	167 (101, 276)	32.28 (19.55, 53.29)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	50	5 (5, 6)	390 (234, 650)	73.32 (44.82, 119.94)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	10 (10, 10)	2754587 (2268630, 3344640)	274100.63 (225748.76, 332808.72)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	10 (10, 10)	5234940 (4335352, 6321193)	523493.98 (433535.17, 632119.29)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	228	5 (5, 5)	5478 (4015, 7473)	1078.45 (791.36, 1469.70)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	228	5 (5, 5)	5966 (4475, 7954)	1163.05 (875.98, 1544.19)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)	7886529 (5982602, 10396367)	788652.86 (598260.24, 1039636.74)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)	12184499 (9858697, 15058989)	1218449.89 (985869.74, 1505898.89)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	51	5 (5, 6)	20307 (11438, 36054)	3912.01 (2231.34, 6858.57)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	51	5 (5, 5)	19769 (10376, 37665)	3953.73 (2075.11, 7533.05)
Age ≥ 65 Communities of Color	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)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Communities of Color	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 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	36	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	36	5 (5, 5)	5 (5, 5)	0.98 (0.94, 1.02)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	50	10 (10, 10)	2116643 (1388474, 3226693)	211664.33 (138847.41, 322669.26)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	50	10 (10, 10)	2964324 (2089369, 4205680)	296432.41 (208936.91, 420567.97)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	50	5 (5, 5)	4026 (2199, 7373)	777.87 (423.25, 1429.59)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	50	5 (5, 6)	4985 (2691, 9234)	936.31 (513.96, 1705.72)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	10 (10, 10)	60501 (48781, 75037)	6050.09 (4878.07, 7503.69)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	10 (10, 10)	103956 (85919, 125780)	10323.75 (8540.15, 12479.85)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	187	5 (5, 5)	214 (164, 280)	42.04 (32.14, 54.99)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	187	5 (5, 5)	317 (243, 412)	62.39 (47.99, 81.11)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	10 (10, 10)	171330 (122104, 240402)	17133.00 (12210.38, 24040.16)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	10 (10, 10)	258922 (193660, 346179)	25892.24 (19365.96, 34617.87)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	66	5 (5, 6)	575 (355, 932)	109.39 (68.12, 175.65)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	66	5 (5, 5)	1037 (709, 1518)	207.43 (141.72, 303.60)
Age ≥ 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 ≥ 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)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	36	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.06)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 White Non-Hispanic	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 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)	34684 (23682, 50795)	3422.26 (2343.82, 4996.92)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)	63090 (45886, 86746)	6309.04 (4588.59, 8674.56)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	60	5 (5, 5)	160 (99, 257)	31.48 (19.58, 50.61)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	60	5 (5, 5)	323 (207, 502)	64.50 (41.47, 100.34)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	10 (10, 10)	2480906 (1963293, 3134986)	248090.62 (196329.26, 313498.63)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	10 (10, 10)	4905828 (4009921, 6001900)	487190.64 (398077.65, 596252.31)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	187	5 (5, 5)	3376 (2393, 4763)	662.37 (469.40, 934.65)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	187	5 (5, 5)	4511 (3339, 6096)	888.68 (657.99, 1200.26)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	10 (10, 10)	7361735 (5495760, 9861264)	736173.49 (549575.99, 986126.43)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	10 (10, 10)	13150407 (11178796, 15469753)	1315040.71 (1117879.58, 1546975.29)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	66	5 (5, 6)	23885 (15539, 36713)	4542.74 (2980.14, 6924.67)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	66	5 (5, 5)	20383 (12350, 33642)	4076.69 (2470.01, 6728.46)
Age ≥ 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 ≥ 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 ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	36	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	36	5 (5, 5)	5 (5, 6)	1.04 (0.96, 1.12)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)	1555275 (1070146, 2260326)	153460.09 (105621.81, 222965.32)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)	2726537 (1931325, 3849174)	272653.70 (193132.47, 384917.37)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	60	5 (5, 5)	2516 (1427, 4435)	495.52 (282.39, 869.51)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	60	5 (5, 5)	4096 (2471, 6792)	819.28 (494.12, 1358.43)

Table 7. The ratios of GMTs/GMCs between groups

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 vs Age < 65	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.01)
Age \geq 65 vs Age < 65	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (1.00, 1.01)
Age \geq 65 vs Age < 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.01 (0.99, 1.02)
Age \geq 65 vs Age < 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.01 (0.99, 1.04)
Age \geq 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 \geq 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 \geq 65 vs Age < 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.03 (0.98, 1.08)
Age \geq 65 vs Age < 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.98 (0.96, 1.00)
Age \geq 65 vs Age < 65	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.98 (0.93, 1.02)
Age \geq 65 vs Age < 65	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Age \geq 65 vs Age < 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	0.99 (0.98, 1.01)
Age \geq 65 vs Age < 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.98 (0.93, 1.03)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 vs Age < 65	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.02)
Age \geq 65 vs Age < 65	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 vs Age < 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.00 (0.95, 1.05)
Age \geq 65 vs Age < 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.01 (0.98, 1.04)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	65260 (56734, 75068)	17393 (14565, 20770)	3.75 (2.99, 4.70)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	112166 (98902, 127209)	31397 (27475, 35879)	3.57 (2.97, 4.29)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	254 (214, 300)	85 (69, 103)	3.00 (2.32, 3.89)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	381 (321, 451)	157 (129, 192)	2.42 (1.86, 3.15)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	158619 (123545, 203649)	24939 (18393, 33814)	6.36 (4.29, 9.43)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	262073 (211994, 323982)	59400 (46119, 76506)	4.41 (3.17, 6.14)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	522 (373, 731)	144 (104, 198)	3.63 (2.28, 5.80)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	988 (733, 1331)	339 (238, 482)	2.92 (1.84, 4.63)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 vs Age < 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 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 \geq 65 vs Age < 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.01 (0.98, 1.04)
Age \geq 65 vs Age < 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.95, 1.03)
Age \geq 65 vs Age < 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	41836 (32047, 54614)	9737 (7318, 12957)	4.30 (2.91, 6.35)
Age \geq 65 vs Age < 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	66891 (53117, 84238)	13380 (10752, 16650)	5.00 (3.64, 6.87)
Age \geq 65 vs Age < 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	156 (112, 216)	40 (29, 54)	3.93 (2.51, 6.13)
Age \geq 65 vs Age < 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	301 (219, 413)	106 (76, 147)	2.85 (1.80, 4.49)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	2692372 (2329146, 3112243)	737116 (604473, 898866)	3.65 (2.86, 4.67)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	5171042 (4536102, 5894857)	1643373 (1397160, 1932976)	3.15 (2.55, 3.88)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	4259 (3414, 5312)	1136 (890, 1449)	3.75 (2.70, 5.21)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	5506 (4535, 6685)	1750 (1355, 2260)	3.15 (2.28, 4.34)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 vs Age < 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	7520373 (6146909, 9200723)	1708031 (1250384, 2333179)	4.40 (3.04, 6.38)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	13148461 (11661345, 14825221)	4266733 (3292306, 5529560)	3.08 (2.32, 4.10)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	21658 (15437, 30385)	4061 (2527, 6527)	5.33 (2.98, 9.55)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	19480 (13318, 28494)	6238 (4090, 9513)	3.12 (1.77, 5.51)
Age \geq 65 vs Age < 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Age \geq 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 \geq 65 vs Age < 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.02 (0.99, 1.05)
Age \geq 65 vs Age < 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.01 (0.97, 1.05)
Age \geq 65 vs Age < 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	1675605 (1276999, 2198632)	270061 (201183, 362521)	6.20 (4.16, 9.26)
Age \geq 65 vs Age < 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	2790960 (2209589, 3525298)	484596 (361146, 650244)	5.76 (3.96, 8.38)
Age \geq 65 vs Age < 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	2827 (1887, 4233)	387 (262, 572)	7.30 (4.17, 12.81)
Age \geq 65 vs Age < 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	4185 (2859, 6127)	1009 (665, 1531)	4.15 (2.36, 7.30)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.01)
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.01)
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.02 (1.00, 1.04)
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.00 (0.98, 1.02)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.01 (0.97, 1.05)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.96, 1.02)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.97 (0.92, 1.03)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 11)	10 (10, 10)	1.02 (0.98, 1.06)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.05)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.98 (0.92, 1.04)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
At-risk vs Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.02)
At-risk vs Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	0.99 (0.94, 1.04)
At-risk vs Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.00 (0.97, 1.03)
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	26276 (22610, 30535)	21736 (17965, 26298)	1.21 (0.95, 1.55)
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	45842 (40067, 52448)	39200 (34023, 45165)	1.17 (0.96, 1.43)
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	103 (87, 122)	108 (87, 133)	0.96 (0.73, 1.26)
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	215 (180, 258)	180 (145, 223)	1.20 (0.91, 1.59)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	55528 (43641, 70653)	31130 (22510, 43050)	1.78 (1.17, 2.72)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	103862 (82479, 130788)	73051 (55946, 95386)	1.42 (0.99, 2.05)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	220 (161, 302)	175 (124, 247)	1.26 (0.78, 2.02)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	443 (318, 617)	412 (284, 597)	1.08 (0.65, 1.78)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
At-risk vs Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.04 (0.99, 1.09)
At-risk vs Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.94, 1.03)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	16713 (12642, 22096)	11818 (8756, 15950)	1.41 (0.93, 2.16)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	26705 (21285, 33505)	16070 (12770, 20222)	1.66 (1.18, 2.33)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	69 (52, 93)	47 (34, 64)	1.48 (0.96, 2.30)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	180 (133, 243)	116 (82, 164)	1.55 (0.97, 2.47)
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	1142597 (961925, 1357205)	904842 (732112, 1118324)	1.26 (0.96, 1.66)
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2144439 (1840509, 2498559)	2066294 (1739231, 2454861)	1.04 (0.82, 1.31)
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	1796 (1424, 2264)	1394 (1075, 1808)	1.29 (0.91, 1.83)
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	2766 (2265, 3377)	2041 (1549, 2690)	1.35 (0.96, 1.91)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	2930270 (2216035, 3874704)	2113273 (1525010, 2928453)	1.39 (0.89, 2.15)
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	6396516 (5214355, 7846688)	5023873 (3827375, 6594416)	1.27 (0.90, 1.80)
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	6128 (4355, 8625)	5532 (3337, 9171)	1.11 (0.59, 2.07)
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	11182 (7684, 16271)	6928 (4429, 10838)	1.61 (0.90, 2.90)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.04)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.00 (0.98, 1.02)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.03 (0.99, 1.07)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	663561 (492320, 894363)	320294 (235413, 435781)	2.07 (1.33, 3.22)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	1012116 (794913, 1288669)	594413 (435730, 810886)	1.70 (1.13, 2.56)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	931 (651, 1331)	482 (318, 728)	1.93 (1.10, 3.39)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	2086 (1418, 3067)	1143 (737, 1774)	1.82 (1.01, 3.29)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.98, 1.01)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.03 (1.00, 1.07)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.98, 1.01)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	0.98 (0.95, 1.02)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.95, 1.03)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.97 (0.91, 1.03)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 11)	10 (10, 10)	1.03 (0.97, 1.10)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.03 (0.97, 1.08)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 6)	0.98 (0.91, 1.05)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	0.98 (0.93, 1.04)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.00 (0.97, 1.03)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	16530 (13368, 20441)	17639 (14174, 21953)	0.94 (0.69, 1.27)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	31028 (25725, 37423)	31500 (26782, 37050)	0.98 (0.77, 1.26)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	68 (54, 85)	90 (70, 115)	0.75 (0.54, 1.05)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	159 (123, 204)	157 (122, 200)	1.01 (0.71, 1.44)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	30603 (22501, 41623)	23567 (16129, 34434)	1.30 (0.80, 2.12)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	62641 (46271, 84801)	58534 (42846, 79967)	1.07 (0.69, 1.65)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	142 (95, 213)	144 (97, 214)	0.99 (0.56, 1.74)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	291 (187, 453)	353 (229, 545)	0.82 (0.44, 1.53)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 6)	5 (5, 5)	1.04 (0.96, 1.12)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.97 (0.93, 1.03)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	10221 (7219, 14470)	9616 (6788, 13622)	1.06 (0.65, 1.74)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	16112 (12299, 21107)	12751 (9770, 16642)	1.26 (0.86, 1.85)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	48 (34, 67)	38 (26, 55)	1.26 (0.77, 2.08)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	127 (87, 186)	101 (68, 150)	1.26 (0.72, 2.19)

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Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	761200 (595277, 973370)	730590 (572430, 932450)	1.04 (0.74, 1.47)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	1498825 (1211392, 1854460)	1685764 (1382036, 2056240)	0.89 (0.66, 1.19)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	1203 (876, 1652)	1118 (830, 1506)	1.08 (0.70, 1.66)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	2067 (1571, 2720)	1671 (1216, 2295)	1.24 (0.81, 1.88)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	1815884 (1228679, 2683724)	1679359 (1144789, 2463552)	1.08 (0.63, 1.87)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	4547755 (3405518, 6073108)	4192147 (3040678, 5779665)	1.08 (0.70, 1.67)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	2953 (1859, 4690)	4435 (2453, 8017)	0.67 (0.31, 1.41)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	7954 (4852, 13039)	5833 (3464, 9821)	1.36 (0.66, 2.80)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 11)	10 (10, 10)	1.02 (0.98, 1.07)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.05)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.07)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	417627 (286526, 608715)	241209 (168681, 344922)	1.73 (1.03, 2.91)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	575539 (423609, 781958)	463469 (322830, 665378)	1.24 (0.77, 1.99)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	502 (325, 776)	362 (224, 583)	1.39 (0.73, 2.65)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	1382 (851, 2245)	930 (559, 1549)	1.49 (0.73, 3.00)

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Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.02)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (1.00, 1.03)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.00 (0.97, 1.02)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.96, 1.03)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5 (5, 6)	5 (5, 5)	1.05 (0.96, 1.15)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)

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Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.96, 1.01)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 11)	10 (10, 10)	1.02 (0.98, 1.06)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.01 (0.95, 1.08)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.95, 1.03)

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Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	54232 (44615, 65922)	80069 (65707, 97571)	0.68 (0.51, 0.89)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	84391 (70325, 101269)	153593 (130667, 180543)	0.55 (0.43, 0.70)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	199 (157, 252)	332 (263, 418)	0.60 (0.43, 0.84)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	348 (276, 438)	421 (328, 540)	0.83 (0.59, 1.16)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	188670 (129392, 275106)	139826 (99996, 195520)	1.35 (0.82, 2.23)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	293282 (210942, 407763)	241494 (182978, 318724)	1.21 (0.79, 1.86)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	541 (337, 870)	508 (317, 815)	1.06 (0.55, 2.08)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	1052 (680, 1627)	944 (626, 1422)	1.12 (0.62, 2.02)

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Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.03 (0.99, 1.08)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.06)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	48060 (30237, 76388)	38048 (27669, 52321)	1.26 (0.72, 2.22)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	79058 (52125, 119908)	59664 (45819, 77691)	1.33 (0.81, 2.17)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	155 (89, 270)	156 (105, 232)	0.99 (0.50, 1.96)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	378 (233, 613)	257 (170, 390)	1.47 (0.77, 2.79)

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Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	2156196 (1736284, 2677662)	3441017 (2860842, 4138850)	0.63 (0.47, 0.83)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	3754377 (3053564, 4616033)	7365218 (6408010, 8465410)	0.51 (0.40, 0.65)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	3359 (2423, 4656)	5534 (4137, 7404)	0.61 (0.39, 0.94)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	4361 (3299, 5763)	7125 (5468, 9285)	0.61 (0.42, 0.90)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	7826271 (5853680, 10463591)	7305563 (5522547, 9664247)	1.07 (0.72, 1.60)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	12884976 (10641883, 15600868)	13343347 (11421210, 15588971)	0.97 (0.76, 1.23)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	27431 (17819, 42227)	18240 (11134, 29880)	1.50 (0.78, 2.88)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	22502 (13237, 38254)	17541 (10280, 29932)	1.28 (0.61, 2.71)

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Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 6)	0.96 (0.90, 1.02)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 6)	5 (5, 5)	1.04 (0.97, 1.11)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	1793880 (1112795, 2891824)	1599200 (1156266, 2211811)	1.12 (0.63, 1.99)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	3402410 (2325361, 4978321)	2437171 (1815977, 3270859)	1.40 (0.87, 2.25)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	3501 (1863, 6577)	2442 (1442, 4134)	1.43 (0.63, 3.27)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	5048 (2709, 9408)	3681 (2278, 5949)	1.37 (0.63, 3.00)
Male vs Female	Day 1	Vaccine	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 SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
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	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	0.99 (0.98, 1.01)
Male vs Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.97, 1.01)
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	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	0.98 (0.94, 1.02)
Male vs Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.01 (0.96, 1.05)
Male vs Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	11 (9, 12)	10 (10, 10)	1.05 (0.95, 1.17)
Male vs Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.97, 1.01)
Male vs Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	0.99 (0.98, 1.01)
Male vs Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 6)	0.97 (0.91, 1.03)
Male vs Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.00)
Male vs Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	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)	0.99 (0.96, 1.02)

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Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Male vs Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	25738 (20110, 32941)	21234 (17837, 25278)	1.21 (0.89, 1.65)
Male vs Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	40290 (34397, 47193)	41415 (35725, 48012)	0.97 (0.78, 1.22)
Male vs Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	121 (93, 157)	98 (80, 120)	1.23 (0.89, 1.72)
Male vs Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	207 (158, 272)	178 (145, 218)	1.17 (0.83, 1.64)
Male vs Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	43301 (30763, 60949)	32117 (22658, 45526)	1.35 (0.81, 2.24)
Male vs Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	83762 (65541, 107048)	77611 (57216, 105276)	1.08 (0.72, 1.62)
Male vs Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	223 (158, 315)	165 (113, 242)	1.35 (0.80, 2.27)
Male vs Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	449 (303, 666)	401 (268, 602)	1.12 (0.64, 1.97)
Male vs Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 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	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.06)
Male vs Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.97 (0.93, 1.02)
Male vs Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	12838 (8743, 18852)	12876 (9489, 17472)	1.00 (0.60, 1.65)
Male vs Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	16359 (12044, 22219)	19468 (15496, 24459)	0.84 (0.56, 1.26)
Male vs Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	43 (29, 63)	58 (42, 81)	0.73 (0.44, 1.23)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Male vs Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	100 (68, 146)	152 (105, 219)	0.66 (0.38, 1.14)
Male vs Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	1032572 (803692, 1326633)	924524 (750510, 1138886)	1.12 (0.80, 1.56)
Male vs Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2448348 (1992531, 3008439)	1878895 (1586011, 2225864)	1.30 (0.99, 1.71)
Male vs Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	1983 (1427, 2754)	1243 (972, 1588)	1.60 (1.05, 2.41)
Male vs Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	2322 (1694, 3181)	2160 (1643, 2840)	1.07 (0.70, 1.64)
Male vs Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	2628794 (1842173, 3751308)	2106655 (1490680, 2977161)	1.25 (0.76, 2.06)
Male vs Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5518909 (4222583, 7213204)	5236885 (3880756, 7066912)	1.05 (0.70, 1.59)
Male vs Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	5567 (3235, 9581)	5754 (3356, 9868)	0.97 (0.45, 2.07)
Male vs Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	9590 (6259, 14696)	6872 (4174, 11314)	1.40 (0.73, 2.67)
Male vs Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.03)
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	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.00 (0.98, 1.02)
Male vs Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.97, 1.01)
Male vs Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	361345 (243436, 536364)	396863 (289955, 543189)	0.91 (0.54, 1.55)
Male vs Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	578439 (406742, 822616)	748414 (540245, 1036794)	0.77 (0.47, 1.28)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Male vs Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	606 (358, 1023)	541 (355, 825)	1.12 (0.56, 2.23)
Male vs Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	930 (554, 1559)	1659 (1064, 2588)	0.56 (0.28, 1.12)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.99, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	0.99 (0.98, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5 (5, 6)	5 (5, 5)	1.05 (0.97, 1.14)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	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 SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	0.99 (0.98, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.01 (0.96, 1.06)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	0.99 (0.98, 1.01)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.97 (0.93, 1.02)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	6 (5, 7)	5 (5, 5)	1.10 (0.90, 1.34)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.97, 1.01)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	22266 (15847, 31284)	23020 (19425, 27280)	0.97 (0.66, 1.42)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	41773 (31562, 55289)	39694 (35055, 44946)	1.05 (0.77, 1.44)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	101 (67, 152)	104 (86, 125)	0.97 (0.62, 1.52)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	190 (126, 284)	191 (158, 230)	0.99 (0.63, 1.55)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	57339 (30559, 107588)	35344 (26390, 47337)	1.62 (0.82, 3.20)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	90332 (50343, 162084)	83383 (65546, 106075)	1.08 (0.58, 2.02)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	254 (155, 417)	183 (133, 251)	1.39 (0.78, 2.48)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	498 (236, 1049)	411 (294, 575)	1.21 (0.55, 2.69)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.00 (0.97, 1.04)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	6 (4, 8)	5 (5, 5)	1.21 (0.89, 1.64)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	34815 (16110, 75239)	11608 (9046, 14896)	3.00 (1.35, 6.66)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	26708 (12585, 56680)	18056 (14910, 21865)	1.48 (0.70, 3.14)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	118 (42, 327)	48 (37, 63)	2.45 (0.88, 6.82)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	351 (151, 818)	123 (92, 165)	2.85 (1.19, 6.80)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	1087406 (737091, 1604213)	987977 (822264, 1187086)	1.10 (0.71, 1.70)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2082654 (1564176, 2772993)	2063432 (1775937, 2397468)	1.01 (0.73, 1.40)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	1727 (1013, 2946)	1500 (1191, 1888)	1.15 (0.64, 2.06)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	2444 (1373, 4350)	2270 (1788, 2883)	1.08 (0.58, 2.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	2735111 (1368395, 5466868)	2315554 (1731123, 3097290)	1.18 (0.56, 2.47)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	7578287 (5040721, 11393296)	5301268 (4150604, 6770929)	1.43 (0.90, 2.28)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	7727 (2908, 20532)	5224 (3348, 8151)	1.48 (0.52, 4.24)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	10208 (4492, 23195)	7937 (5300, 11886)	1.29 (0.53, 3.14)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.00)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	0.99 (0.98, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.99 (0.97, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	747435 (391924, 1425424)	381696 (293138, 497006)	1.96 (0.99, 3.89)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	1403460 (609038, 3234119)	648311 (505732, 831086)	2.16 (0.93, 5.02)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	1522 (466, 4976)	555 (395, 782)	2.74 (0.84, 8.96)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	3063 (1057, 8877)	1324 (921, 1904)	2.31 (0.78, 6.86)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.02 (1.00, 1.04)
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	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.00 (0.99, 1.01)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.03 (1.00, 1.06)
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	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.00 (0.98, 1.02)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5 (5, 6)	5 (5, 5)	1.05 (0.99, 1.11)
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)	0.99 (0.96, 1.01)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.02 (0.99, 1.05)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 6)	0.97 (0.90, 1.05)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD 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	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	Positive	Pseudovirus-nAb ID50	5 (5, 6)	5 (5, 5)	1.03 (0.97, 1.10)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.01 (1.00, 1.02)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	23355 (19242, 28347)	23438 (18669, 29425)	1.00 (0.74, 1.34)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	40216 (34320, 47124)	40376 (34349, 47460)	1.00 (0.79, 1.25)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	99 (79, 124)	115 (90, 147)	0.86 (0.62, 1.20)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	208 (163, 266)	188 (146, 241)	1.11 (0.78, 1.57)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	44605 (32113, 61955)	30985 (21434, 44793)	1.44 (0.88, 2.36)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	90964 (70627, 117156)	72481 (53061, 99008)	1.25 (0.84, 1.88)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	238 (171, 332)	148 (104, 211)	1.61 (0.99, 2.62)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	545 (371, 802)	348 (226, 535)	1.57 (0.88, 2.80)
Communities of Color vs White Non-Hispanic	Day 29	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 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	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.00 (0.99, 1.01)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 6)	5 (5, 5)	1.06 (0.96, 1.16)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	17596 (12331, 25109)	10931 (7560, 15804)	1.61 (0.96, 2.69)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	18884 (13334, 26743)	18868 (14808, 24043)	1.00 (0.65, 1.53)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	54 (34, 84)	52 (37, 74)	1.03 (0.58, 1.81)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	178 (110, 288)	107 (76, 150)	1.67 (0.92, 3.01)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	977894 (775549, 1233031)	1035293 (809568, 1323956)	0.94 (0.67, 1.32)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2083276 (1732503, 2505069)	2145772 (1770774, 2600184)	0.97 (0.74, 1.27)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	1903 (1416, 2557)	1376 (1010, 1874)	1.38 (0.90, 2.12)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	2744 (2021, 3725)	2011 (1465, 2761)	1.36 (0.88, 2.12)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	3146770 (2273084, 4356267)	1943813 (1349835, 2799166)	1.62 (0.99, 2.64)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5991417 (4527248, 7929117)	4608987 (3338577, 6362819)	1.30 (0.85, 1.99)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	7086 (4582, 10956)	4550 (2471, 8378)	1.56 (0.74, 3.30)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	8885 (5903, 13374)	7994 (4646, 13757)	1.11 (0.56, 2.19)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	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 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	Pseudovirus-nAb ID50	5 (5, 5)	5 (5, 5)	1.01 (0.99, 1.03)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.98 (0.96, 1.01)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	397884 (256621, 616908)	393045 (287516, 537306)	1.01 (0.59, 1.73)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	734879 (489927, 1102301)	674526 (485396, 937351)	1.09 (0.65, 1.84)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	684 (382, 1222)	575 (371, 892)	1.19 (0.57, 2.46)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	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	1409 (809, 2454)	1478 (953, 2292)	0.95 (0.47, 1.93)

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

Group	Visit	Baseline SARS-CoV-2	Marker	Comparison	Responder	% 2-Fold Rise	% 4-Fold Rise
	Day 29	Negative	Anti RBD IgG (IU/ml)	Vaccine vs Placebo	100% (100%, 100%)	100% (100%, 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	Pseudovirus-nAb ID50	Vaccine vs Placebo	87.1% (82.7%, 90%)	87.5% (83.2%, 90.4%)	81.8% (77.9%, 85.1%)
	Day 29	Negative	Pseudovirus-nAb ID80	Vaccine vs Placebo	93% (87.4%, 95.1%)	93% (87.4%, 95.1%)	87.3% (80.6%, 90.2%)
	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	Pseudovirus-nAb ID50	Vaccine vs Placebo	12.6% (5.3%, 20.1%)	12.3% (5.1%, 19.9%)	23.2% (13.3%, 32.3%)
	Day 29	Positive	Pseudovirus-nAb ID80	Vaccine vs Placebo	5.5% (-0.1%, 11.6%)	5.4% (-0.4%, 11.5%)	9.9% (3.5%, 17%)
	Day 57	Negative	Anti RBD IgG (IU/ml)	Vaccine vs Placebo	99.4% (96%, 99.9%)	99.4% (96%, 99.9%)	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	Pseudovirus-nAb ID50	Vaccine vs Placebo	98% (95.7%, 98.8%)	98% (95.7%, 98.8%)	97.4% (95.6%, 98.5%)
	Day 57	Negative	Pseudovirus-nAb ID80	Vaccine vs Placebo	98.2% (94.7%, 99.1%)	98.2% (94.7%, 99.1%)	98.3% (96.4%, 99.2%)
	Day 57	Positive	Anti RBD IgG (IU/ml)	Vaccine vs Placebo	0% (0%, 0%)	0% (0%, 0%)	0% (0%, 0%)
	Day 57	Positive	Anti Spike IgG (IU/ml)	Vaccine vs Placebo	0% (0%, 0%)	0% (0%, 0%)	0% (0%, 0%)
	Day 57	Positive	Pseudovirus-nAb ID50	Vaccine vs Placebo	4.1% (1.7%, 9.4%)	4.1% (1.7%, 9.4%)	7.7% (4.1%, 14%)

(continued)

Group	Visit	Baseline SARS-CoV-2	Marker	Comparison	Responder	% 2-Fold Rise	% 4-Fold Rise
	Day 57	Positive	Pseudovirus-nAb ID80	Vaccine vs Placebo	2% (0.6%, 6.8%)	2% (0.6%, 6.8%)	2.5% (0.9%, 6.8%)

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 RBD IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	22926 (19863, 26460)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	2292.58 (1986.35, 2646.03)
Day 29	Anti Spike IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	40963 (36741, 45671)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	4096.31 (3674.06, 4567.08)
Day 29	Pseudovirus-nAb ID50	914	11733.1/13295 = 88.3% (84.7%, 91.0%)	106 (91, 125)	163	149.5/13359 = 1.1% (0.3%, 3.8%)	5 (5, 5)	87.1% (82.7%, 90%)	21.04 (17.92, 24.71)
Day 29	Pseudovirus-nAb ID80	914	12521.7/13295 = 94.2% (91.6%, 96.0%)	189 (161, 222)	163	160.7/13359 = 1.2% (0.2%, 6.1%)	5 (5, 5)	93% (87.4%, 95.1%)	37.14 (31.48, 43.81)
Day 57	Anti RBD IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	966160 (823437, 1133621)	163	76.3/13359 = 0.6% (0.1%, 4.0%)	10 (10, 10)	99.4% (96%, 99.9%)	96216.76 (81986.55, 112916.89)
Day 57	Anti Spike IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	2087965 (1831068, 2380904)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	208796.50 (183106.81, 238090.43)
Day 57	Pseudovirus-nAb ID50	914	13159.4/13295 = 99.0% (98.0%, 99.5%)	1497 (1228, 1825)	163	131.9/13359 = 1.0% (0.3%, 3.0%)	5 (5, 5)	98% (95.7%, 98.8%)	297.04 (243.64, 362.15)
Day 57	Pseudovirus-nAb ID80	914	13174.8/13295 = 99.1% (97.1%, 99.7%)	2223 (1809, 2733)	163	120.7/13359 = 0.9% (0.2%, 3.8%)	5 (5, 5)	98.2% (94.7%, 99.1%)	440.71 (358.41, 541.91)

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 RBD IgG (IU/ml)	274 1432/1432 = 100.0% (100.0%, 100.0%)	36133 (28182, 46328)	270 1357/1357 = 100.0% (100.0%, 100.0%)	12861 (10150, 16296)	0% (0%, 0%)	2.81 (1.99, 3.96)		
Day 29	Anti Spike IgG (IU/ml)	274 1432/1432 = 100.0% (100.0%, 100.0%)	79981 (65041, 98352)	270 1357/1357 = 100.0% (100.0%, 100.0%)	18191 (15159, 21829)	0% (0%, 0%)	4.40 (3.34, 5.79)		
Day 29	Pseudovirus-nAb ID50	274 1383.1/1432 = 96.6% (91.6%, 98.7%)	186 (142, 243)	270 1139.8/1357 = 84.0% (76.8%, 89.3%)	51 (40, 66)	12.6% (5.3%, 20.1%)	3.61 (2.50, 5.22)		
Day 29	Pseudovirus-nAb ID80	274 1407.2/1432 = 98.3% (93.8%, 99.5%)	420 (314, 560)	270 1258.5/1357 = 92.7% (86.8%, 96.1%)	129 (98, 169)	5.5% (-0.1%, 11.6%)	3.25 (2.19, 4.83)		
Day 57	Anti RBD IgG (IU/ml)	274 1432/1432 = 100.0% (100.0%, 100.0%)	2298869 (1785648, 2959596)	270 1357/1357 = 100.0% (100.0%, 100.0%)	382614 (299829, 488256)	0% (0%, 0%)	6.01 (4.23, 8.54)		
Day 57	Anti Spike IgG (IU/ml)	274 1432/1432 = 100.0% (100.0%, 100.0%)	5346334 (4339333, 6587023)	270 1357/1357 = 100.0% (100.0%, 100.0%)	676872 (531354, 862241)	0% (0%, 0%)	7.90 (5.74, 10.87)		
Day 57	Pseudovirus-nAb ID50	274 1432/1432 = 100.0% (100.0%, 100.0%)	5680 (3863, 8351)	270 1301.8/1357 = 95.9% (90.6%, 98.3%)	566 (409, 783)	4.1% (1.7%, 9.4%)	10.04 (6.07, 16.62)		
Day 57	Pseudovirus-nAb ID80	274 1432/1432 = 100.0% (100.0%, 100.0%)	7837 (5545, 11076)	270 1330.1/1357 = 98.0% (93.2%, 99.4%)	1324 (937, 1870)	2% (0.6%, 6.8%)	5.92 (3.63, 9.65)		

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

Visit	Marker	Vaccine Recipients							
		Baseline SARS-CoV-2 Positive				Baseline SARS-CoV-2 Negative			Comparison
		N	Resp rate	GMT/GMC	N	Resp rate	GMT/GMC	Resp Rate Difference	GMTR/GMCR
Day 29	Anti RBD IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	36133 (28182, 46328)	914	13295/13295 = 100.0% (100.0%, 100.0%)	22926 (19863, 26460)	0% (0%, 0%)	1.58 (1.18, 2.10)
Day 29	Anti Spike IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	79981 (65041, 98352)	914	13295/13295 = 100.0% (100.0%, 100.0%)	40963 (36741, 45671)	0% (0%, 0%)	1.95 (1.55, 2.47)
Day 29	Pseudovirus-nAb ID50	274	1383.1/1432 = 96.6% (91.6%, 98.7%)	186 (142, 243)	914	11733.1/13295 = 88.3% (84.7%, 91.0%)	106 (91, 125)	8.3% (2.6%, 12.4%)	1.75 (1.28, 2.39)
Day 29	Pseudovirus-nAb ID80	274	1407.2/1432 = 98.3% (93.8%, 99.5%)	420 (314, 560)	914	12521.7/13295 = 94.2% (91.6%, 96.0%)	189 (161, 222)	4.1% (-0.8%, 7%)	2.22 (1.59, 3.09)
Day 57	Anti RBD IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	2298869 (1785648, 2959596)	914	13295/13295 = 100.0% (100.0%, 100.0%)	966160 (823437, 1133621)	0% (0%, 0%)	2.38 (1.76, 3.21)
Day 57	Anti Spike IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	5346334 (4339333, 6587023)	914	13295/13295 = 100.0% (100.0%, 100.0%)	2087965 (1831068, 2380904)	0% (0%, 0%)	2.56 (2.00, 3.28)
Day 57	Pseudovirus-nAb ID50	274	1432/1432 = 100.0% (100.0%, 100.0%)	5680 (3863, 8351)	914	13159.4/13295 = 99.0% (98.0%, 99.5%)	1497 (1228, 1825)	1% (0.5%, 2%)	3.79 (2.46, 5.85)
Day 57	Pseudovirus-nAb ID80	274	1432/1432 = 100.0% (100.0%, 100.0%)	7837 (5545, 11076)	914	13174.8/13295 = 99.1% (97.1%, 99.7%)	2223 (1809, 2733)	0.9% (0.3%, 2.9%)	3.53 (2.36, 5.27)

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

Visit	Marker	Placebo Recipients							
		Baseline SARS-CoV-2 Positive			Baseline SARS-CoV-2 Negative			Comparison	
N	Resp rate	GMT/GMC	N	Resp rate	GMT/GMC	Resp Rate Difference	GMTR/GMCR		
Day 29	Anti RBD IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	12861 (10150, 16296)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	1286.10 (1015.03, 1629.57)
Day 29	Anti Spike IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	18191 (15159, 21829)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	1819.07 (1515.87, 2182.92)
Day 29	Pseudovirus-nAb ID50	270	1139.8/1357 = 84.0% (76.8%, 89.3%)	51 (40, 66)	163	149.5/13359 = 1.1% (0.3%, 3.8%)	5 (5, 5)	82.9% (75.2%, 88.2%)	10.18 (7.90, 13.11)
Day 29	Pseudovirus-nAb ID80	270	1258.5/1357 = 92.7% (86.8%, 96.1%)	129 (98, 169)	163	160.7/13359 = 1.2% (0.2%, 6.1%)	5 (5, 5)	91.5% (83.8%, 95.1%)	25.36 (19.29, 33.34)
Day 57	Anti RBD IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	382614 (299829, 488256)	163	76.3/13359 = 0.6% (0.1%, 4.0%)	10 (10, 10)	99.4% (96%, 99.9%)	38103.25 (29854.93, 48630.43)
Day 57	Anti Spike IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	676872 (531354, 862241)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	67687.19 (53135.41, 86224.15)
Day 57	Pseudovirus-nAb ID50	270	1301.8/1357 = 95.9% (90.6%, 98.3%)	566 (409, 783)	163	131.9/13359 = 1.0% (0.3%, 3.0%)	5 (5, 5)	94.9% (89.3%, 97.4%)	112.24 (81.10, 155.32)
Day 57	Pseudovirus-nAb ID80	270	1330.1/1357 = 98.0% (93.2%, 99.4%)	1324 (937, 1870)	163	120.7/13359 = 0.9% (0.2%, 3.8%)	5 (5, 5)	97.1% (91.5%, 98.7%)	262.45 (185.80, 370.71)