COVID-19 Correlates Immunogenicity Analysis Report

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Chapter 1

Graphical Description of Immunogenicity Data

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

1.1.1 Baseline SARS-CoV-2 Negative

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

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

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

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

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

1.1.2 Baseline SARS-CoV-2 Positive

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1.3.2 Baseline SARS-CoV-2 positive

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

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

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

1.4.1 Baseline SARS-CoV-2 negative

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

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

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

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

1.4.2 Baseline SARS-CoV-2 positive

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

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

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

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

1.4.3 Baseline negative vs. positive vaccine recipients

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

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

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

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

1.4.4 Baseline negative vs. positive placebo recipients

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

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

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

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

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

1.5.2 Baseline SARS-CoV-2 positive

Figure 1.50: (Mock data) 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: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by age groups.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1.6.2 Baseline SARS-CoV-2 positive

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1.7.1 Baseline SARS-CoV-2 negative

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

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

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

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

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

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

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

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

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

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

1.7.2 Baseline SARS-CoV-2 positive

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Chapter 2

Tabular Description of Immunogenicity Data

Table 1. Demographic

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

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

Table 2a. Percentage of responders, and participants with concentrations ¿= 2 x LLOD or ¿= 4 x LLOD for binding antibody markers by All participants

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

(continued)

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

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

Table 2b. Percentage of responders, and participants with concentrations ¿= 2 x LLOD or ¿= 4 x LLOD for binding antibody markers by Age

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

(continued)

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

(continued)

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

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

Table 2c. Percentage of responders, and participants with concentrations ¿= 2 x LLOD or ¿= 4 x LLOD for binding antibody markers by Risk for Severe Covid-19

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

(continued)

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

(continued)

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

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

Table 2d. Percentage of responders, and participants with concentrations ¿= 2 x LLOD or ¿= 4 x LLOD for binding antibody markers by Age, Risk for Severe Covid-19

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

(continued)

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

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

(continued)

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

(continued)

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

(continued)

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

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

Table 2e. Percentage of responders, and participants with concentrations ¿= 2 x LLOD or ¿= 4 x LLOD for binding antibody markers by Sex

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

(continued)

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

(continued)

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

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

Table 2f. Percentage of responders, and participants with concentrations ¿= 2 x LLOD or ¿= 4 x LLOD for binding antibody markers by Age, sex

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

Table 2g. Percentage of responders, and participants with concentrations ¿= 2 x LLOD or ¿= 4 x LLOD for binding antibody markers by Hispanic or Latino ethnicity

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

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	38	181.5/181.5 = 100.0% (100.0%, 100.0%)	181.5/181.5 = 100.0% (100.0%, 100.0%)	181.5/181.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	38	181.5/181.5 = 100.0% (100.0%, 100.0%)	181.5/181.5 = 100.0% (100.0%, 100.0%)	181.5/181.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	20	0/1346.6 = 0.0% (0.0%, 0.0%)	0/1346.6 = 0.0% (0.0%, 0.0%)	0/1346.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	20	0/1346.6 = 0.0% (0.0%, 0.0%)	0/1346.6 = 0.0% (0.0%, 0.0%)	0/1346.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	20	0/1346.6 = 0.0% (0.0%, 0.0%)	0/1346.6 = 0.0% (0.0%, 0.0%)	0/1346.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	45	166.7/166.7 = 100.0% (100.0%, 100.0%)	166.7/166.7 = 100.0% (100.0%, 100.0%)	166.7/166.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	45	166.7/166.7 = 100.0% (100.0%, 100.0%)	166.7/166.7 = 100.0% (100.0%, 100.0%)	166.7/166.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	45	166.7/166.7 = 100.0% (100.0%, 100.0%)	166.7/166.7 = 100.0% (100.0%, 100.0%)	166.7/166.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	723	11121.2/11121.2 = 100.0% (100.0%, 100.0%)	11121.2/11121.2 = 100.0% (100.0%, 100.0%)	11113.5/11121.2 = 99.9% (99.5%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	723	11121.2/11121.2 = 100.0% (100.0%, 100.0%)	11121.2/11121.2 = 100.0% (100.0%, 100.0%)	11121.2/11121.2 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	723	11121.2/11121.2 = 100.0% (100.0%, 100.0%)	11121.2/11121.2 = 100.0% (100.0%, 100.0%)	11121.2/11121.2 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	208	1105.3/1105.3 = 100.0% (100.0%, 100.0%)	1105.3/1105.3 = 100.0% (100.0%, 100.0%)	1105.3/1105.3 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	208	1105.3/1105.3 = 100.0% (100.0%, 100.0%)	1105.3/1105.3 = 100.0% (100.0%, 100.0%)	1105.3/1105.3 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	208	1105.3/1105.3 = 100.0% (100.0%, 100.0%)	1105.3/1105.3 = 100.0% (100.0%, 100.0%)	1105.3/1105.3 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	119	0/10327.8 = 0.0% (0.0%, 0.0%)	0/10327.8 = 0.0% (0.0%, 0.0%)	0/10327.8 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	119	0/10327.8 = 0.0% (0.0%, 0.0%)	0/10327.8 = 0.0% (0.0%, 0.0%)	0/10327.8 = 0.0% (0.0%, 0.0%)

(continued)

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

(continued)

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

(continued)

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

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

Table 2h. Percentage of responders, and participants with concentrations ¿= 2 x LLOD or ¿= 4 x LLOD for binding antibody markers by Race

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

Table 2i. Percentage of responders, and participants with concentrations ¿= 2 x LLOD or ¿= 4 x LLOD for binding antibody markers by Race and ethnic group

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

(continued)

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

(continued)

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

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

Table 2j. Percentage of responders, and participants with concentrations ¿= 2 x LLOD or ¿= 4 x LLOD for binding antibody markers by Age, Race and ethnic group

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

(continued)

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

(continued)

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

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

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

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

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

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

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

(continued)

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

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

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

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

(continued)

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

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

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

(continued)

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

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

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

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

(continued)

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

(continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

(continued)

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

(continued)

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

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

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

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

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

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

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

(continued)

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

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

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

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

(continued)

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

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

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

(continued)

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

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

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

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

(continued)

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

(continued)

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

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

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

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Multiracial	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	12	10 (10, 10)
Multiracial	Day 29	Placebo	Negative	Live virus-nAb MN50	12	31 (31, 31)
Multiracial	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	12	5 (5, 5)
Multiracial	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	12	5 (5, 5)
Multiracial	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	12	31749 (8579, 117498)
Multiracial	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	12	19083 (4166, 87413)
Multiracial	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	12	19160 (9716, 37784)
Multiracial	Day 29	Placebo	Positive	Live virus-nAb MN50	12	64 (40, 102)
Multiracial	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	12	97 (22, 436)
Multiracial	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	12	160 (55, 471)
Multiracial	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	50	468542 (204733, 1072285)
Multiracial	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	50	816376 (423873, 1572332)
Multiracial	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	50	2093286 (1344168, 3259893)
Multiracial	Day 57	Vaccine	Negative	Live virus-nAb MN50	50	925 (504, 1696)
Multiracial	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	50	1466 (704, 3055)
Multiracial	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	50	1297 (771, 2184)
Multiracial	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	16	1668847 (377763, 7372483)
Multiracial	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	16	6098484 (3170420, 11730783)
Multiracial	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	16	5861262 (2842505, 12085955)
Multiracial	Day 57	Vaccine	Positive	Live virus-nAb MN50	16	4476 (1899, 10550)
Multiracial	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	16	5842 (1516, 22508)

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	72	31 (31, 31)	454 (322, 639)	14.60 (10.38, 20.55)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	72	5 (5, 5)	386 (258, 576)	77.14 (51.70, 115.11)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	72	5 (5, 5)	703 (480, 1029)	140.52 (95.91, 205.89)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	40	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 10)	10 (10, 10)	1.02 (0.98, 1.05)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Negative	Live virus-nAb MN50	40	31 (31, 31)	31 (31, 31)	1.00 (1.00, 1.00)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	40	5 (5, 5)	5 (5, 5)	1.02 (0.98, 1.05)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	40	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	60	10 (10, 10)	25075 (15874, 39610)	2507.52 (1587.38, 3961.03)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)	38154 (27521, 52895)	3815.40 (2752.11, 5289.48)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 11)	44708 (34466, 57994)	4385.81 (3402.89, 5652.64)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	60	31 (31, 31)	113 (81, 157)	3.62 (2.60, 5.04)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	60	5 (5, 5)	104 (68, 159)	20.48 (13.39, 31.32)
Age ¿= 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	60	5 (5, 5)	179 (120, 268)	35.84 (24.01, 53.50)
Age ¿= 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	266	10 (10, 10)	1097233 (851492, 1413895)	109723.33 (85149.21, 141389.54)

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

Table 7. The ratios of GMTs/GMCs between groups

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

(continued)

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

(continued)

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

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

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

(continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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