COVID-19 Correlates Immunogenicity Analysis Report

COVID-19 Prevention Network (CoVPN) Biostatistics Team

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Chapter 1

Graphical Description of Immunogenicity Data

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

1.1.1 Baseline SARS-CoV-2 Negative

Figure 1.1: (Mock data) Pair plots of D57 Ab markers: baseline negative vaccine arm

1.1.2 Baseline SARS-CoV-2 Positive

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

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

Figure 1.2: (Mock data) Pair plots of D29 fold-rise over D1 Ab markers: baseline negative vaccine arm

1.3.1 Baseline SARS-CoV-2 negative

1.3.2 Baseline SARS-CoV-2 positive

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

1.4.1 Baseline SARS-CoV-2 negative

1.4.2 Baseline SARS-CoV-2 positive

1.4.3 Baseline negative vs. positive vaccine recipients

1.4.4 Baseline negative vs. positive placebo recipients

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

1.5.1 Baseline SARS-CoV-2 negative

1.5.2 Baseline SARS-CoV-2 positive

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

1.6.1 Baseline SARS-CoV-2 negative

1.6.2 Baseline SARS-CoV-2 positive

Figure 1.3: (Mock data) Pair plots of D57 fold-rise over D1 Ab markers: baseline negative vaccine arm

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

1.7.1 Baseline SARS-CoV-2 negative

1.7.2 Baseline SARS-CoV-2 positive

Figure 1.4: (Mock data) Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline negative vaccine arm

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

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Figure 1.8: (Mock data) Pair plots of D29 Ab markers: baseline positive vaccine arm

Figure 1.9: (Mock data) Pair plots of D57 Ab markers: baseline positive vaccine arm

Figure 1.10: (Mock data) Pair plots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm

Figure 1.11: (Mock data) Pair plots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm

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Figure 1.16: (Mock data) RCDF plots for D29 Ab markers: by baseline status x randomization arm

Figure 1.17: (Mock data) RCDF plots for D57 Ab markers: by baseline status x randomization arm

Figure 1.18: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: by baseline status x randomization arm

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Figure 1.20: (Mock data) RCDF plots for D29 Ab markers: by baseline status for the vaccine arm

Figure 1.21: (Mock data) RCDF plots for D57 Ab markers: by baseline status for the vaccine arm

Figure 1.22: (Mock data) RCDF plots for D29 over D1 fold-rise Ab markers: by baseline status for the vaccine arm

Figure 1.23: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: by baseline status for the vaccine arm

Figure 1.24: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm

Figure 1.25: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm

Figure 1.26: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm

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Figure 1.28: (Mock data) Scatter plots for D29 Ab markers vs. age: baseline negative vaccine arm

Figure 1.29: (Mock data) Scatter plots for D57 Ab markers vs. age: baseline negative vaccine arm

Figure 1.30: (Mock data) Scatter plots for D29 Ab markers vs. age: baseline positive vaccine arm

Figure 1.31: (Mock data) Scatter plots for D57 Ab markers vs. age: baseline positive vaccine arm

Figure 1.32: (Mock data) Boxplots of D29 Ab markers: baseline negative vaccine + placebo arms

Figure 1.33: (Mock data) Boxplots of D57 Ab markers: baseline negative vaccine + placebo arms

Figure 1.34: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

Figure 1.35: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

Figure 1.36: (Mock data) Boxplots of D29 Ab markers: baseline positive vaccine + placebo arms

Figure 1.37: (Mock data) Boxplots of D57 Ab markers: baseline positive vaccine + placebo arms

Figure 1.38: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms

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Figure 1.40: (Mock data) Boxplots of D29 Ab markers: baseline positive + negative vaccine arm

Figure 1.41: (Mock data) Boxplots of D57 Ab markers: baseline positive + negative vaccine arm

Figure 1.42: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm

Figure 1.43: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm

Figure 1.44: (Mock data) Boxplots of D29 Ab markers: baseline positive + negative placebo arm

Figure 1.45: (Mock data) Boxplots of D57 Ab markers: baseline positive + negative placebo arm

Figure 1.46: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

Figure 1.47: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

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

Figure 1.51: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by age groups.

Figure 1.52: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

Figure 1.53: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

Figure 1.54: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by high-risk condition.

Figure 1.55: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by high-risk condition.

Figure 1.56: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

Figure 1.57: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

Figure 1.58: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and high-risk condition.

Figure 1.59: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and high-risk condition.

Figure 1.60: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.

Figure 1.61: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.

Figure 1.62: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by sex assigned at birth.

Figure 1.63: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by sex assigned at birth.

Figure 1.64: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

Figure 1.65: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

Figure 1.66: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

Figure 1.67: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

Figure 1.68: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

Figure 1.69: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex at birth.

Figure 1.70: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by ethnicity.

Figure 1.71: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by ethnicity.

Figure 1.72: (Mock data) RCDF plots for D29 fold-rise over D1 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 D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

Figure 1.75: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by race.

Figure 1.76: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by race.

Figure 1.77: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

Figure 1.78: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

Figure 1.79: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

Figure 1.80: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

Figure 1.81: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

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Figure 1.83: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

Figure 1.84: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

Figure 1.85: (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 1.86: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

Figure 1.87: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by age groups.

Figure 1.88: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by age groups.

Figure 1.89: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

Figure 1.90: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

Figure 1.91: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by high-risk condition.

Figure 1.92: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by high-risk condition.

Figure 1.93: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

Figure 1.94: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

Figure 1.95: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and high-risk condition.

Figure 1.96: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and high-risk condition.

Figure 1.97: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

Figure 1.98: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

Figure 1.99: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by sex assigned at birth.

Figure 1.100: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by sex assigned at birth.

Figure 1.101: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

Figure 1.102: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

Figure 1.103: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

Figure 1.104: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

Figure 1.105: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

Figure 1.106: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

Figure 1.107: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by ethnicity.

Figure 1.108: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by ethnicity.

Figure 1.109: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

Figure 1.110: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

Figure 1.111: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by race.

Figure 1.112: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by race.

Figure 1.113: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

Figure 1.114: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

Figure 1.115: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

Figure 1.116: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

Figure 1.117: (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 1.118: (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 1.119: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

Figure 1.120: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

Figure 1.121: (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 1.122: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

Figure 1.123: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

Figure 1.124: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

Figure 1.125: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.

Figure 1.126: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.

Figure 1.127: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

Figure 1.128: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

Figure 1.129: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.

Figure 1.130: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.

Figure 1.131: (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 1.132: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

Figure 1.133: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

Figure 1.134: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

Figure 1.135: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

Figure 1.136: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

Figure 1.137: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

Figure 1.138: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

Figure 1.139: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

Figure 1.140: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

Figure 1.141: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

Figure 1.142: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

Figure 1.143: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

Figure 1.144: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

Figure 1.145: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

Figure 1.146: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

Figure 1.147: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

Figure 1.148: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

Figure 1.149: (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 1.150: (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	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12403.4/12410.2 = 99.9% (99.6%, 100.0%)
	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12410.2/12410.2 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12410.2/12410.2 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)
	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	155	6.5/2373.7 = 0.3% (0.0%, 1.9%)	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1334/1337.3 = 99.8% (98.2%, 100.0%)
	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1334/1337.3 = 99.8% (98.2%, 100.0%)
	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1337.3/1337.3 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12410.2/12410.2 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12410.2/12410.2 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	12410.2/12410.2 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	1416.8/1416.8 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 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	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1337.3/1337.3 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1337.3/1337.3 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	1337.3/1337.3 = 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	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9745.8/9752.5 = 99.9% (99.5%, 100.0%)
Age ¡ 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9752.5/9752.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9752.5/9752.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	145	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	145	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	145	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	79	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)
Age ¡ 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	79	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)
Age ¡ 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	79	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)
Age ¡ 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	149	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1063/1066.3 = 99.7% (97.8%, 100.0%)
Age ¡ 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	149	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1063/1066.3 = 99.7% (97.8%, 100.0%)
Age ¡ 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	149	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1066.3/1066.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	432	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9752.5/9752.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9752.5/9752.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9752.5/9752.5 = 100.0% (100.0%, 100.0%)	9752.5/9752.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	145	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	145	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	145	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)	1132.2/1132.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	79	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)
Age ¡ 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	79	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 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	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)
Age ¡ 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	149	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1066.3/1066.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	149	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1066.3/1066.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	149	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1066.3/1066.3 = 100.0% (100.0%, 100.0%)	1066.3/1066.3 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	472	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	472	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	472	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	128	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	76	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)
Age ¿= 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	76	6.5/532.8 = 1.2% (0.2%, 8.5%)	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)
Age ¿= 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	76	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 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	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	472	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	472	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)	2657.6/2657.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	128	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 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	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	76	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)
Age ¿= 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	76	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)
Age ¿= 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	76	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 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	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3341.6/3348.4 = 99.8% (98.6%, 100.0%)
At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	460	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3348.4/3348.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	460	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3348.4/3348.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	126	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	126	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	126	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	78	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	78	6.5/590.5 = 1.1% (0.1%, 7.7%)	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	78	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	120	314.6/314.6 = 100.0% (100.0%, 100.0%)	314.6/314.6 = 100.0% (100.0%, 100.0%)	311.3/314.6 = 98.9% (92.7%, 99.9%)
At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	120	314.6/314.6 = 100.0% (100.0%, 100.0%)	314.6/314.6 = 100.0% (100.0%, 100.0%)	311.3/314.6 = 98.9% (92.7%, 99.9%)
At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	120	314.6/314.6 = 100.0% (100.0%, 100.0%)	314.6/314.6 = 100.0% (100.0%, 100.0%)	314.6/314.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	460	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3348.4/3348.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	460	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3348.4/3348.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	460	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3348.4/3348.4 = 100.0% (100.0%, 100.0%)	3348.4/3348.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	126	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	126	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	126	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)	359.5/359.5 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	78	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	78	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 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	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	120	314.6/314.6 = 100.0% (100.0%, 100.0%)	314.6/314.6 = 100.0% (100.0%, 100.0%)	314.6/314.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	120	314.6/314.6 = 100.0% (100.0%, 100.0%)	314.6/314.6 = 100.0% (100.0%, 100.0%)	314.6/314.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	120	314.6/314.6 = 100.0% (100.0%, 100.0%)	314.6/314.6 = 100.0% (100.0%, 100.0%)	314.6/314.6 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	444	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	444	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	444	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	147	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	147	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	147	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	77	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	77	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	77	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	150	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	150	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	150	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	444	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	444	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	444	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)	9061.8/9061.8 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	147	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	147	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 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	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	77	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	77	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	77	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	150	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	150	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	150	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 100.0% (100.0%, 100.0%)	1022.7/1022.7 = 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	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1986.5/1993.3 = 99.7% (97.6%, 100.0%)
Age ¡ 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1993.3/1993.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1993.3/1993.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	73	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	39	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)
Age ¡ 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	39	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)
Age ¡ 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	39	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)
Age ¡ 65 At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	75	211.7/211.7 = 100.0% (100.0%, 100.0%)	211.7/211.7 = 100.0% (100.0%, 100.0%)	208.4/211.7 = 98.4% (89.2%, 99.8%)
Age ¡ 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	75	211.7/211.7 = 100.0% (100.0%, 100.0%)	211.7/211.7 = 100.0% (100.0%, 100.0%)	208.4/211.7 = 98.4% (89.2%, 99.8%)
Age ¡ 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	75	211.7/211.7 = 100.0% (100.0%, 100.0%)	211.7/211.7 = 100.0% (100.0%, 100.0%)	211.7/211.7 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	216	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1993.3/1993.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1993.3/1993.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1993.3/1993.3 = 100.0% (100.0%, 100.0%)	1993.3/1993.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	73	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 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	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 100.0% (100.0%, 100.0%)	240/240 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	39	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)
Age ¡ 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	39	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)
Age ¡ 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	39	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)
Age ¡ 65 At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	75	211.7/211.7 = 100.0% (100.0%, 100.0%)	211.7/211.7 = 100.0% (100.0%, 100.0%)	211.7/211.7 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	75	211.7/211.7 = 100.0% (100.0%, 100.0%)	211.7/211.7 = 100.0% (100.0%, 100.0%)	211.7/211.7 = 100.0% (100.0%, 100.0%)
Age ¡ 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	75	211.7/211.7 = 100.0% (100.0%, 100.0%)	211.7/211.7 = 100.0% (100.0%, 100.0%)	211.7/211.7 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	216	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	72	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	40	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	40	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 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)	40	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	74	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	74	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	74	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	216	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)	7759.3/7759.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	72	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	40	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	40	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	40	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	74	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	74	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	74	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 100.0% (100.0%, 100.0%)	854.6/854.6 = 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	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	244	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	244	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	53	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	53	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	53	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	39	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)
Age ¿= 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	39	6.5/272.3 = 2.4% (0.3%, 16.2%)	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)
Age ¿= 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	39	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 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	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	244	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	244	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)	1355.1/1355.1 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	53	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 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	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	53	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	39	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)
Age ¿= 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	39	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)
Age ¿= 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	39	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 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	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	75	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	75	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	75	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	37	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	37	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 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	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 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	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	75	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	75	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	75	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	37	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	37	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	37	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 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	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6951.5/6958.3 = 99.9% (99.3%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	511	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6958.3/6958.3 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	511	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6958.3/6958.3 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	149	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)
Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	85	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	85	6.5/1307.2 = 0.5% (0.1%, 3.5%)	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	85	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	149	800.5/800.5 = 100.0% (100.0%, 100.0%)	800.5/800.5 = 100.0% (100.0%, 100.0%)	797.2/800.5 = 99.6% (97.1%, 99.9%)
Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	149	800.5/800.5 = 100.0% (100.0%, 100.0%)	800.5/800.5 = 100.0% (100.0%, 100.0%)	797.2/800.5 = 99.6% (97.1%, 99.9%)
Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	149	800.5/800.5 = 100.0% (100.0%, 100.0%)	800.5/800.5 = 100.0% (100.0%, 100.0%)	800.5/800.5 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	511	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6958.3/6958.3 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	511	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6958.3/6958.3 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	511	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6958.3/6958.3 = 100.0% (100.0%, 100.0%)	6958.3/6958.3 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	149	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)	763.9/763.9 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	85	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)
Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	85	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 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	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)
Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	149	800.5/800.5 = 100.0% (100.0%, 100.0%)	800.5/800.5 = 100.0% (100.0%, 100.0%)	800.5/800.5 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	149	800.5/800.5 = 100.0% (100.0%, 100.0%)	800.5/800.5 = 100.0% (100.0%, 100.0%)	800.5/800.5 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	149	800.5/800.5 = 100.0% (100.0%, 100.0%)	800.5/800.5 = 100.0% (100.0%, 100.0%)	800.5/800.5 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	393	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	393	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	393	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	124	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	124	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	124	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	70	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	70	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	70	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	121	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	121	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	121	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	393	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	393	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	393	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)	5451.9/5451.9 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	124	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	124	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 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	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	70	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	70	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	70	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	121	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	121	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	121	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 100.0% (100.0%, 100.0%)	536.8/536.8 = 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	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5472.2/5478.9 = 99.9% (99.1%, 100.0%)
Age ¡ 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	245	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5478.9/5478.9 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	245	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5478.9/5478.9 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	77	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	77	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	77	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	45	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	45	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	45	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	89	667/667 = 100.0% (100.0%, 100.0%)	667/667 = 100.0% (100.0%, 100.0%)	663.7/667 = 99.5% (96.4%, 99.9%)
Age ¡ 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	89	667/667 = 100.0% (100.0%, 100.0%)	667/667 = 100.0% (100.0%, 100.0%)	663.7/667 = 99.5% (96.4%, 99.9%)
Age ¡ 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	89	667/667 = 100.0% (100.0%, 100.0%)	667/667 = 100.0% (100.0%, 100.0%)	667/667 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	245	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5478.9/5478.9 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	245	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5478.9/5478.9 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	245	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5478.9/5478.9 = 100.0% (100.0%, 100.0%)	5478.9/5478.9 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	77	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 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	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	77	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 100.0% (100.0%, 100.0%)	603.5/603.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	45	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	45	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	45	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	89	667/667 = 100.0% (100.0%, 100.0%)	667/667 = 100.0% (100.0%, 100.0%)	667/667 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	89	667/667 = 100.0% (100.0%, 100.0%)	667/667 = 100.0% (100.0%, 100.0%)	667/667 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	89	667/667 = 100.0% (100.0%, 100.0%)	667/667 = 100.0% (100.0%, 100.0%)	667/667 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	187	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	68	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	68	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	68	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	34	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	34	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	34	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	60	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 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	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	60	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	187	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)	4273.6/4273.6 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	68	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	68	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	68	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	34	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	34	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	34	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	60	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	60	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	60	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 100.0% (100.0%, 100.0%)	399.3/399.3 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	266	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	266	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	266	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	72	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 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	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	40	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	40	6.5/278.8 = 2.3% (0.3%, 15.9%)	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	40	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 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	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	266	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	266	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	72	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	40	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	40	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	40	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 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	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	206	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	206	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	56	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	36	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	36	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	36	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 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	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 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 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	206	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	206	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 100.0% (100.0%, 100.0%)	1178.3/1178.3 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	56	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	36	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	36	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	36	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 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	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	112	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	112	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 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	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	20	6.5/323.2 = 2.0% (0.2%, 15.0%)	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	20	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 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	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	112	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	112	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 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	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	20	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	20	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 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	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10406.4/10413.1 = 99.9% (99.5%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	723	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10413.1/10413.1 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	723	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10413.1/10413.1 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	208	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	208	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	208	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	119	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	119	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 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	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	198	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1013.2/1016.5 = 99.7% (97.7%, 100.0%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	198	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1013.2/1016.5 = 99.7% (97.7%, 100.0%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	198	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1016.5/1016.5 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	723	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10413.1/10413.1 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	723	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10413.1/10413.1 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	723	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10413.1/10413.1 = 100.0% (100.0%, 100.0%)	10413.1/10413.1 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	208	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	208	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	208	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)	1083.5/1083.5 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	119	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	119	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	119	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	198	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1016.5/1016.5 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	198	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1016.5/1016.5 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	198	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1016.5/1016.5 = 100.0% (100.0%, 100.0%)	1016.5/1016.5 = 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	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	69	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	69	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	27	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	27	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	27	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	16	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	27	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	27	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	27	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	69	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	69	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	69	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	27	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 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 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	27	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	27	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	16	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	27	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	27	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	27	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 100.0% (100.0%, 100.0%)	154.1/154.1 = 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 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	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	659.7/663 = 99.5% (96.4%, 99.9%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	659.7/663 = 99.5% (96.4%, 99.9%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	389	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 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	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	186	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	186	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	186	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	37	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	37	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	37	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Black or African American	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	30	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)
Black or African American	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	6.5/460.2 = 1.4% (0.2%, 10.3%)	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)
Black or African American	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 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	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	186	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	186	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)	1902.4/1902.4 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	37	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	37	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Black or African American	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	37	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)	150.7/150.7 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	30	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 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	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 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	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)
Asian	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	11	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 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	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 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	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 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	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	11	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	11	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 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	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 100.0% (100.0%, 100.0%)

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Group	Visit	Arm	Baseline COVID	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 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	0/59.5 = 0.0%	0/59.5 = 0.0%	0/59.5 = 0.0%
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0/59.5 = 0.0%	0/59.5 = 0.0%	0/59.5 = 0.0%
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0/59.5 = 0.0%	0/59.5 = 0.0%	0/59.5 = 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	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 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	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 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	0/59.5 = 0.0%	0/59.5 = 0.0%	0/59.5 = 0.0%
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0/59.5 = 0.0%	0/59.5 = 0.0%	0/59.5 = 0.0%
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0/59.5 = 0.0%	0/59.5 = 0.0%	0/59.5 = 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	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 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	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 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	0/22 = 0.0%	0/22 = 0.0%	0/22 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	3	0/22 = 0.0%	0/22 = 0.0%	0/22 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	3	0/22 = 0.0%	0/22 = 0.0%	0/22 = 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	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 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	0/22 = 0.0%	0/22 = 0.0%	0/22 = 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	0/22 = 0.0%	0/22 = 0.0%	0/22 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	3	0/22 = 0.0%	0/22 = 0.0%	0/22 = 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	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	50	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	50	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 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	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)
Multiracial	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	12	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)
Multiracial	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	12	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 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	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	50	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	50	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 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	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	12	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	12	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 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	215.2/215.2 = 100.0% (100.0%, 100.0%)	215.2/215.2 = 100.0% (100.0%, 100.0%)	208.4/215.2 = 96.8% (78.4%, 99.6%)
Other	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	215.2/215.2 = 100.0% (100.0%, 100.0%)	215.2/215.2 = 100.0% (100.0%, 100.0%)	215.2/215.2 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	215.2/215.2 = 100.0% (100.0%, 100.0%)	215.2/215.2 = 100.0% (100.0%, 100.0%)	215.2/215.2 = 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	0/12.9 = 0.0%	0/12.9 = 0.0%	0/12.9 = 0.0%
Other	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	2	0/12.9 = 0.0%	0/12.9 = 0.0%	0/12.9 = 0.0%
Other	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	2	0/12.9 = 0.0%	0/12.9 = 0.0%	0/12.9 = 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	215.2/215.2 = 100.0% (100.0%, 100.0%)	215.2/215.2 = 100.0% (100.0%, 100.0%)	215.2/215.2 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	215.2/215.2 = 100.0% (100.0%, 100.0%)	215.2/215.2 = 100.0% (100.0%, 100.0%)	215.2/215.2 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	215.2/215.2 = 100.0% (100.0%, 100.0%)	215.2/215.2 = 100.0% (100.0%, 100.0%)	215.2/215.2 = 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	0/12.9 = 0.0%	0/12.9 = 0.0%	0/12.9 = 0.0%
Other	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	2	0/12.9 = 0.0%	0/12.9 = 0.0%	0/12.9 = 0.0%
Other	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	2	0/12.9 = 0.0%	0/12.9 = 0.0%	0/12.9 = 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	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	82	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	82	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	29	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 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	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	16	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	19	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	19	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	19	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	82	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	82	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	82	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)	1261.1/1261.1 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	29	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	16	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 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	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	19	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	19	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 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 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	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	659.7/663 = 99.5% (96.4%, 99.9%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	659.7/663 = 99.5% (96.4%, 99.9%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	389	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)	6612/6612 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 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	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	112	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)	663/663 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	401	3982/3982 = 100.0% (100.0%, 100.0%)	3982/3982 = 100.0% (100.0%, 100.0%)	3975.2/3982 = 99.8% (98.8%, 100.0%)
Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	401	3982/3982 = 100.0% (100.0%, 100.0%)	3982/3982 = 100.0% (100.0%, 100.0%)	3982/3982 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	401	3982/3982 = 100.0% (100.0%, 100.0%)	3982/3982 = 100.0% (100.0%, 100.0%)	3982/3982 = 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	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	65	6.5/1009.6 = 0.6% (0.1%, 4.6%)	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 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	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 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	3982/3982 = 100.0% (100.0%, 100.0%)	3982/3982 = 100.0% (100.0%, 100.0%)	3982/3982 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	401	3982/3982 = 100.0% (100.0%, 100.0%)	3982/3982 = 100.0% (100.0%, 100.0%)	3982/3982 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	401	3982/3982 = 100.0% (100.0%, 100.0%)	3982/3982 = 100.0% (100.0%, 100.0%)	3982/3982 = 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	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	65	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	65	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 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	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	191	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	191	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	56	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	36	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	36	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	36	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	61	532.9/532.9 = 100.0% (100.0%, 100.0%)	532.9/532.9 = 100.0% (100.0%, 100.0%)	529.6/532.9 = 99.4% (95.5%, 99.9%)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	532.9/532.9 = 100.0% (100.0%, 100.0%)	532.9/532.9 = 100.0% (100.0%, 100.0%)	529.6/532.9 = 99.4% (95.5%, 99.9%)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	532.9/532.9 = 100.0% (100.0%, 100.0%)	532.9/532.9 = 100.0% (100.0%, 100.0%)	532.9/532.9 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	191	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	191	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	191	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)	5204.1/5204.1 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	56	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 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	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	36	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	36	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	36	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	61	532.9/532.9 = 100.0% (100.0%, 100.0%)	532.9/532.9 = 100.0% (100.0%, 100.0%)	532.9/532.9 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	61	532.9/532.9 = 100.0% (100.0%, 100.0%)	532.9/532.9 = 100.0% (100.0%, 100.0%)	532.9/532.9 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	61	532.9/532.9 = 100.0% (100.0%, 100.0%)	532.9/532.9 = 100.0% (100.0%, 100.0%)	532.9/532.9 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	184	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3130.7/3137.5 = 99.8% (98.5%, 100.0%)
Age ¡ 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3137.5/3137.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3137.5/3137.5 = 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	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 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	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3137.5/3137.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3137.5/3137.5 = 100.0% (100.0%, 100.0%)
Age ¡ 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3137.5/3137.5 = 100.0% (100.0%, 100.0%)	3137.5/3137.5 = 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	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 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	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	217	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	217	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 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	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	35	6.5/226.5 = 2.9% (0.4%, 19.2%)	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	35	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 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	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	217	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	217	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 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	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	35	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)
Age ¿= 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	35	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 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	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 100.0% (100.0%, 100.0%)
Age ¿= 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 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	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 100.0% (100.0%, 100.0%)
Age ¿= 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	56	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)
Age ¿= 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)
Age ¿= 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)
Age ¿= 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	30	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)
Age ¿= 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)
Age ¿= 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 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	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 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	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 100.0% (100.0%, 100.0%)
Age ¿= 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 100.0% (100.0%, 100.0%)	1407.8/1407.8 = 100.0% (100.0%, 100.0%)
Age ¿= 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	56	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)
Age ¿= 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)
Age ¿= 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)
Age ¿= 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	30	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)
Age ¿= 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)
Age ¿= 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 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	11057/12410.2 = 89.1% (85.9%, 91.7%)	11057/12410.2 = 89.1% (85.9%, 91.7%)	10165.7/12410.2 = 81.9% (78.1%, 85.2%)
	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	273	1364.6/1416.8 = 96.3% (91.9%, 98.4%)	1364.6/1416.8 = 96.3% (91.9%, 98.4%)	1275.9/1416.8 = 90.1% (83.9%, 94.0%)
	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	155	52.5/2373.7 = 2.2% (0.5%, 9.5%)	52.5/2373.7 = 2.2% (0.5%, 9.5%)	0/2373.7 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	270	1098.3/1337.3 = 82.1% (74.5%, 87.9%)	1100.1/1337.3 = 82.3% (74.6%, 88.0%)	900.4/1337.3 = 67.3% (59.1%, 74.6%)
	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	904	12283.9/12410.2 = 99.0% (97.9%, 99.5%)	12283.9/12410.2 = 99.0% (97.9%, 99.5%)	12138.5/12410.2 = 97.8% (96.5%, 98.6%)
	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	273	1413.9/1416.8 = 99.8% (98.6%, 100.0%)	1413.9/1416.8 = 99.8% (98.6%, 100.0%)	1398.1/1416.8 = 98.7% (93.1%, 99.8%)
	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	155	38.5/2373.7 = 1.6% (0.2%, 11.0%)	38.5/2373.7 = 1.6% (0.2%, 11.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	270	1294.1/1337.3 = 96.8% (91.1%, 98.9%)	1294.1/1337.3 = 96.8% (91.1%, 98.9%)	1192.2/1337.3 = 89.2% (81.9%, 93.7%)

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 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	8473.2/9752.5 = 86.9% (82.8%, 90.1%)	8473.2/9752.5 = 86.9% (82.8%, 90.1%)	7708.7/9752.5 = 79.0% (74.3%, 83.1%)
Age ¡ 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	145	1080/1132.2 = 95.4% (89.8%, 98.0%)	1080/1132.2 = 95.4% (89.8%, 98.0%)	1001/1132.2 = 88.4% (80.7%, 93.3%)
Age ¡ 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	79	38.5/1841 = 2.1% (0.3%, 14.1%)	38.5/1841 = 2.1% (0.3%, 14.1%)	0/1841 = 0.0% (0.0%, 0.0%)
Age ¡ 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	149	845.6/1066.3 = 79.3% (69.8%, 86.4%)	845.6/1066.3 = 79.3% (69.8%, 86.4%)	672.2/1066.3 = 63.0% (52.9%, 72.1%)
Age ¡ 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	432	9633.4/9752.5 = 98.8% (97.4%, 99.4%)	9633.4/9752.5 = 98.8% (97.4%, 99.4%)	9510/9752.5 = 97.5% (95.8%, 98.5%)
Age ¡ 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	145	1129.3/1132.2 = 99.7% (98.2%, 100.0%)	1129.3/1132.2 = 99.7% (98.2%, 100.0%)	1113.6/1132.2 = 98.4% (91.4%, 99.7%)
Age ¡ 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	79	38.5/1841 = 2.1% (0.3%, 14.1%)	38.5/1841 = 2.1% (0.3%, 14.1%)	0/1841 = 0.0% (0.0%, 0.0%)
Age ¡ 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	149	1025/1066.3 = 96.1% (88.9%, 98.7%)	1025/1066.3 = 96.1% (88.9%, 98.7%)	928.2/1066.3 = 87.0% (78.0%, 92.7%)
Age ¿= 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	472	2583.8/2657.6 = 97.2% (95.2%, 98.4%)	2583.8/2657.6 = 97.2% (95.2%, 98.4%)	2457.1/2657.6 = 92.5% (89.5%, 94.6%)
Age ¿= 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	128	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)	274.9/284.6 = 96.6% (91.2%, 98.7%)
Age ¿= 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	76	13.9/532.8 = 2.6% (0.6%, 10.3%)	13.9/532.8 = 2.6% (0.6%, 10.3%)	0/532.8 = 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	2650.5/2657.6 = 99.7% (98.1%, 100.0%)	2650.5/2657.6 = 99.7% (98.1%, 100.0%)	2628.5/2657.6 = 98.9% (97.3%, 99.6%)
Age ¿= 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	128	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)	284.6/284.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	76	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 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	2982.2/3348.4 = 89.1% (85.5%, 91.8%)	2982.2/3348.4 = 89.1% (85.5%, 91.8%)	2671.8/3348.4 = 79.8% (75.5%, 83.5%)
At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	126	341.1/359.5 = 94.9% (89.1%, 97.7%)	341.1/359.5 = 94.9% (89.1%, 97.7%)	313.7/359.5 = 87.2% (79.9%, 92.2%)
At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	78	13.9/590.5 = 2.4% (0.6%, 9.3%)	13.9/590.5 = 2.4% (0.6%, 9.3%)	0/590.5 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	120	262.1/314.6 = 83.3% (75.2%, 89.1%)	262.1/314.6 = 83.3% (75.2%, 89.1%)	228.1/314.6 = 72.5% (63.4%, 80.0%)
At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	460	3276.8/3348.4 = 97.9% (95.7%, 98.9%)	3276.8/3348.4 = 97.9% (95.7%, 98.9%)	3204.1/3348.4 = 95.7% (93.0%, 97.4%)
At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	126	356.7/359.5 = 99.2% (94.5%, 99.9%)	356.7/359.5 = 99.2% (94.5%, 99.9%)	356.7/359.5 = 99.2% (94.5%, 99.9%)
At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	78	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	120	311.3/314.6 = 98.9% (92.7%, 99.9%)	311.3/314.6 = 98.9% (92.7%, 99.9%)	295.4/314.6 = 93.9% (87.4%, 97.1%)
Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	444	8074.8/9061.8 = 89.1% (84.7%, 92.3%)	8074.8/9061.8 = 89.1% (84.7%, 92.3%)	7494/9061.8 = 82.7% (77.6%, 86.8%)
Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	147	1023.4/1057.2 = 96.8% (90.0%, 99.0%)	1023.4/1057.2 = 96.8% (90.0%, 99.0%)	962.2/1057.2 = 91.0% (82.3%, 95.7%)
Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	77	38.5/1783.2 = 2.2% (0.3%, 14.5%)	38.5/1783.2 = 2.2% (0.3%, 14.5%)	0/1783.2 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	150	836.2/1022.7 = 81.8% (71.7%, 88.8%)	838.1/1022.7 = 81.9% (71.9%, 89.0%)	672.3/1022.7 = 65.7% (55.2%, 74.9%)
Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	444	9007.2/9061.8 = 99.4% (97.6%, 99.8%)	9007.2/9061.8 = 99.4% (97.6%, 99.8%)	8934.4/9061.8 = 98.6% (96.7%, 99.4%)
Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	147	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1057.2/1057.2 = 100.0% (100.0%, 100.0%)	1041.4/1057.2 = 98.5% (89.9%, 99.8%)
Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	77	38.5/1783.2 = 2.2% (0.3%, 14.5%)	38.5/1783.2 = 2.2% (0.3%, 14.5%)	0/1783.2 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	150	982.8/1022.7 = 96.1% (88.5%, 98.7%)	982.8/1022.7 = 96.1% (88.5%, 98.7%)	896.9/1022.7 = 87.7% (78.2%, 93.4%)

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 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	1686/1993.3 = 84.6% (79.0%, 88.9%)	1686/1993.3 = 84.6% (79.0%, 88.9%)	1466.1/1993.3 = 73.6% (67.0%, 79.2%)
Age ¡ 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	73	221.6/240 = 92.3% (83.7%, 96.6%)	221.6/240 = 92.3% (83.7%, 96.6%)	199/240 = 82.9% (72.5%, 89.9%)
Age ¡ 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	39	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)
Age ¡ 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	75	173.7/211.7 = 82.1% (71.4%, 89.4%)	173.7/211.7 = 82.1% (71.4%, 89.4%)	146/211.7 = 69.0% (57.1%, 78.8%)
Age ¡ 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	216	1928.8/1993.3 = 96.8% (93.2%, 98.5%)	1928.8/1993.3 = 96.8% (93.2%, 98.5%)	1860/1993.3 = 93.3% (88.9%, 96.1%)
Age ¡ 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	73	237.1/240 = 98.8% (91.7%, 99.8%)	237.1/240 = 98.8% (91.7%, 99.8%)	237.1/240 = 98.8% (91.7%, 99.8%)
Age ¡ 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	39	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)
Age ¡ 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	75	208.4/211.7 = 98.4% (89.2%, 99.8%)	208.4/211.7 = 98.4% (89.2%, 99.8%)	195/211.7 = 92.1% (82.9%, 96.5%)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	216	6787.2/7759.3 = 87.5% (82.4%, 91.3%)	6787.2/7759.3 = 87.5% (82.4%, 91.3%)	6242.6/7759.3 = 80.5% (74.5%, 85.3%)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	72	858.4/892.2 = 96.2% (88.1%, 98.9%)	858.4/892.2 = 96.2% (88.1%, 98.9%)	802.1/892.2 = 89.9% (79.5%, 95.3%)
Age ¡ 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	40	38.5/1522.8 = 2.5% (0.3%, 17.2%)	38.5/1522.8 = 2.5% (0.3%, 17.2%)	0/1522.8 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	74	671.9/854.6 = 78.6% (66.7%, 87.1%)	671.9/854.6 = 78.6% (66.7%, 87.1%)	526.3/854.6 = 61.6% (49.2%, 72.6%)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	216	7704.6/7759.3 = 99.3% (97.2%, 99.8%)	7704.6/7759.3 = 99.3% (97.2%, 99.8%)	7650/7759.3 = 98.6% (96.3%, 99.5%)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	72	892.2/892.2 = 100.0% (100.0%, 100.0%)	892.2/892.2 = 100.0% (100.0%, 100.0%)	876.4/892.2 = 98.2% (87.9%, 99.8%)
Age ¡ 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	40	38.5/1522.8 = 2.5% (0.3%, 17.2%)	38.5/1522.8 = 2.5% (0.3%, 17.2%)	0/1522.8 = 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	816.6/854.6 = 95.6% (86.2%, 98.7%)	816.6/854.6 = 95.6% (86.2%, 98.7%)	733.2/854.6 = 85.8% (74.4%, 92.6%)
Age ¿= 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	244	1296.2/1355.1 = 95.7% (92.1%, 97.7%)	1296.2/1355.1 = 95.7% (92.1%, 97.7%)	1205.7/1355.1 = 89.0% (84.1%, 92.5%)
Age ¿= 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	53	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)	114.7/119.6 = 95.9% (84.6%, 99.0%)
Age ¿= 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	39	13.9/272.3 = 5.1% (1.2%, 19.7%)	13.9/272.3 = 5.1% (1.2%, 19.7%)	0/272.3 = 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	1348/1355.1 = 99.5% (96.3%, 99.9%)	1348/1355.1 = 99.5% (96.3%, 99.9%)	1344.1/1355.1 = 99.2% (96.6%, 99.8%)
Age ¿= 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	53	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)	119.6/119.6 = 100.0% (100.0%, 100.0%)
Age ¿= 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	39	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 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	1287.6/1302.5 = 98.9% (96.3%, 99.7%)	1287.6/1302.5 = 98.9% (96.3%, 99.7%)	1251.4/1302.5 = 96.1% (92.4%, 98.0%)
Age ¿= 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	75	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)	160.2/165 = 97.1% (88.7%, 99.3%)
Age ¿= 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	37	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 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	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1302.5/1302.5 = 100.0% (100.0%, 100.0%)	1284.4/1302.5 = 98.6% (95.6%, 99.6%)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	75	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	37	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 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	6204.1/6958.3 = 89.2% (84.7%, 92.5%)	6204.1/6958.3 = 89.2% (84.7%, 92.5%)	5589.4/6958.3 = 80.3% (75.0%, 84.8%)
Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	149	727.1/763.9 = 95.2% (87.1%, 98.3%)	727.1/763.9 = 95.2% (87.1%, 98.3%)	697.4/763.9 = 91.3% (83.6%, 95.6%)
Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	85	45/1307.2 = 3.4% (0.6%, 17.6%)	45/1307.2 = 3.4% (0.6%, 17.6%)	0/1307.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	149	650.2/800.5 = 81.2% (70.5%, 88.7%)	652.1/800.5 = 81.5% (70.7%, 88.9%)	510.3/800.5 = 63.7% (52.3%, 73.8%)
Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	511	6895.3/6958.3 = 99.1% (97.5%, 99.7%)	6895.3/6958.3 = 99.1% (97.5%, 99.7%)	6779.1/6958.3 = 97.4% (95.3%, 98.6%)
Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	149	761/763.9 = 99.6% (97.4%, 99.9%)	761/763.9 = 99.6% (97.4%, 99.9%)	761/763.9 = 99.6% (97.4%, 99.9%)
Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	85	38.5/1307.2 = 2.9% (0.4%, 19.1%)	38.5/1307.2 = 2.9% (0.4%, 19.1%)	0/1307.2 = 0.0% (0.0%, 0.0%)
Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	149	770.3/800.5 = 96.2% (86.0%, 99.1%)	770.3/800.5 = 96.2% (86.0%, 99.1%)	721.9/800.5 = 90.2% (80.0%, 95.5%)
Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	393	4853/5451.9 = 89.0% (83.9%, 92.7%)	4853/5451.9 = 89.0% (83.9%, 92.7%)	4576.3/5451.9 = 83.9% (78.2%, 88.4%)
Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	124	637.5/652.9 = 97.6% (91.7%, 99.4%)	637.5/652.9 = 97.6% (91.7%, 99.4%)	578.5/652.9 = 88.6% (77.0%, 94.8%)
Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	70	7.5/1066.6 = 0.7% (0.1%, 5.0%)	7.5/1066.6 = 0.7% (0.1%, 5.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	121	448/536.8 = 83.5% (70.7%, 91.4%)	448/536.8 = 83.5% (70.7%, 91.4%)	390/536.8 = 72.7% (60.3%, 82.3%)
Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	393	5388.6/5451.9 = 98.8% (96.8%, 99.6%)	5388.6/5451.9 = 98.8% (96.8%, 99.6%)	5359.4/5451.9 = 98.3% (96.3%, 99.2%)
Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	124	652.9/652.9 = 100.0% (100.0%, 100.0%)	652.9/652.9 = 100.0% (100.0%, 100.0%)	637.1/652.9 = 97.6% (84.1%, 99.7%)
Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	70	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	121	523.9/536.8 = 97.6% (91.2%, 99.4%)	523.9/536.8 = 97.6% (91.2%, 99.4%)	470.4/536.8 = 87.6% (74.7%, 94.4%)

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 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	4765.5/5478.9 = 87.0% (81.3%, 91.1%)	4765.5/5478.9 = 87.0% (81.3%, 91.1%)	4223.9/5478.9 = 77.1% (70.4%, 82.7%)
Age ¡ 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	77	566.7/603.5 = 93.9% (83.7%, 97.9%)	566.7/603.5 = 93.9% (83.7%, 97.9%)	544.3/603.5 = 90.2% (80.4%, 95.4%)
Age ¡ 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	45	38.5/1028.3 = 3.7% (0.5%, 24.1%)	38.5/1028.3 = 3.7% (0.5%, 24.1%)	0/1028.3 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	89	530.6/667 = 79.6% (66.7%, 88.3%)	530.6/667 = 79.6% (66.7%, 88.3%)	403.9/667 = 60.6% (47.2%, 72.5%)
Age ¡ 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	245	5416/5478.9 = 98.9% (96.8%, 99.6%)	5416/5478.9 = 98.9% (96.8%, 99.6%)	5314.7/5478.9 = 97.0% (94.3%, 98.4%)
Age ¡ 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	77	600.7/603.5 = 99.5% (96.6%, 99.9%)	600.7/603.5 = 99.5% (96.6%, 99.9%)	600.7/603.5 = 99.5% (96.6%, 99.9%)
Age ¡ 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	45	38.5/1028.3 = 3.7% (0.5%, 24.1%)	38.5/1028.3 = 3.7% (0.5%, 24.1%)	0/1028.3 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	89	636.7/667 = 95.5% (83.3%, 98.9%)	636.7/667 = 95.5% (83.3%, 98.9%)	590.9/667 = 88.6% (76.3%, 94.9%)
Age ¡ 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	187	3707.7/4273.6 = 86.8% (80.2%, 91.4%)	3707.7/4273.6 = 86.8% (80.2%, 91.4%)	3484.7/4273.6 = 81.5% (74.2%, 87.1%)
Age ¡ 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	68	513.3/528.7 = 97.1% (89.7%, 99.2%)	513.3/528.7 = 97.1% (89.7%, 99.2%)	456.8/528.7 = 86.4% (72.1%, 94.0%)
Age ¡ 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	34	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	60	315/399.3 = 78.9% (62.0%, 89.5%)	315/399.3 = 78.9% (62.0%, 89.5%)	268.3/399.3 = 67.2% (51.0%, 80.1%)
Age ¡ 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	187	4217.4/4273.6 = 98.7% (96.0%, 99.6%)	4217.4/4273.6 = 98.7% (96.0%, 99.6%)	4195.4/4273.6 = 98.2% (95.6%, 99.3%)
Age ¡ 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	68	528.7/528.7 = 100.0% (100.0%, 100.0%)	528.7/528.7 = 100.0% (100.0%, 100.0%)	512.9/528.7 = 97.0% (80.6%, 99.6%)
Age ¡ 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	34	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	60	388.2/399.3 = 97.2% (87.9%, 99.4%)	388.2/399.3 = 97.2% (87.9%, 99.4%)	337.3/399.3 = 84.5% (67.3%, 93.5%)
Age ¿= 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	266	1438.6/1479.4 = 97.2% (94.4%, 98.7%)	1438.6/1479.4 = 97.2% (94.4%, 98.7%)	1365.5/1479.4 = 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	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)	153.1/160.4 = 95.5% (86.6%, 98.6%)
Age ¿= 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	40	6.5/278.8 = 2.3% (0.3%, 15.9%)	6.5/278.8 = 2.3% (0.3%, 15.9%)	0/278.8 = 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	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1479.4/1479.4 = 100.0% (100.0%, 100.0%)	1464.5/1479.4 = 99.0% (96.7%, 99.7%)
Age ¿= 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	72	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	40	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 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	1145.3/1178.3 = 97.2% (93.7%, 98.8%)	1145.3/1178.3 = 97.2% (93.7%, 98.8%)	1091.6/1178.3 = 92.6% (87.8%, 95.7%)
Age ¿= 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	56	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)	121.8/124.2 = 98.0% (86.7%, 99.7%)
Age ¿= 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	36	7.5/253.9 = 2.9% (0.4%, 19.7%)	7.5/253.9 = 2.9% (0.4%, 19.7%)	0/253.9 = 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	1171.2/1178.3 = 99.4% (95.8%, 99.9%)	1171.2/1178.3 = 99.4% (95.8%, 99.9%)	1164.1/1178.3 = 98.8% (95.3%, 99.7%)
Age ¿= 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	56	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)	124.2/124.2 = 100.0% (100.0%, 100.0%)
Age ¿= 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	36	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 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	831.6/1003.1 = 82.9% (68.8%, 91.4%)	831.6/1003.1 = 82.9% (68.8%, 91.4%)	754.6/1003.1 = 75.2% (61.0%, 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	6.5/323.2 = 2.0% (0.2%, 15.0%)	6.5/323.2 = 2.0% (0.2%, 15.0%)	0/323.2 = 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	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	1003.1/1003.1 = 100.0% (100.0%, 100.0%)	995.3/1003.1 = 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	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 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	9350.6/10413.1 = 89.8% (86.3%, 92.5%)	9350.6/10413.1 = 89.8% (86.3%, 92.5%)	8550.4/10413.1 = 82.1% (77.9%, 85.6%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	208	1043.1/1083.5 = 96.3% (90.6%, 98.6%)	1043.1/1083.5 = 96.3% (90.6%, 98.6%)	1006.7/1083.5 = 92.9% (86.6%, 96.4%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	119	46/1750.4 = 2.6% (0.5%, 13.3%)	46/1750.4 = 2.6% (0.5%, 13.3%)	0/1750.4 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	198	825/1016.5 = 81.2% (71.8%, 87.9%)	825/1016.5 = 81.2% (71.8%, 87.9%)	671.8/1016.5 = 66.1% (56.2%, 74.7%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	723	10286.9/10413.1 = 98.8% (97.5%, 99.4%)	10286.9/10413.1 = 98.8% (97.5%, 99.4%)	10149.3/10413.1 = 97.5% (95.9%, 98.4%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	208	1080.6/1083.5 = 99.7% (98.1%, 100.0%)	1080.6/1083.5 = 99.7% (98.1%, 100.0%)	1080.6/1083.5 = 99.7% (98.1%, 100.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	119	38.5/1750.4 = 2.2% (0.3%, 14.6%)	38.5/1750.4 = 2.2% (0.3%, 14.6%)	0/1750.4 = 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	993.6/1016.5 = 97.7% (90.7%, 99.5%)	993.6/1016.5 = 97.7% (90.7%, 99.5%)	913.9/1016.5 = 89.9% (81.2%, 94.8%)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	69	874.9/994 = 88.0% (68.6%, 96.1%)	874.9/994 = 88.0% (68.6%, 96.1%)	860.7/994 = 86.6% (68.0%, 95.2%)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	27	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)	105.3/151.8 = 69.4% (35.8%, 90.2%)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	16	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	27	127.1/154.1 = 82.5% (48.4%, 95.9%)	127.1/154.1 = 82.5% (48.4%, 95.9%)	121.2/154.1 = 78.7% (46.9%, 93.9%)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	69	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)	994/994 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	27	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)	136/151.8 = 89.6% (45.8%, 98.9%)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	16	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	27	133.8/154.1 = 86.8% (51.1%, 97.6%)	133.8/154.1 = 86.8% (51.1%, 97.6%)	116.1/154.1 = 75.4% (42.3%, 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	6083.4/6612 = 92.0% (87.5%, 95.0%)	6083.4/6612 = 92.0% (87.5%, 95.0%)	5594/6612 = 84.6% (79.2%, 88.8%)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	112	644.7/664 = 97.1% (85.8%, 99.5%)	644.7/664 = 97.1% (85.8%, 99.5%)	611.1/664 = 92.0% (81.8%, 96.7%)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	66	38.5/1027 = 3.8% (0.5%, 23.7%)	38.5/1027 = 3.8% (0.5%, 23.7%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	112	531.2/663 = 80.1% (67.1%, 88.8%)	531.2/663 = 80.1% (67.1%, 88.8%)	453.1/663 = 68.3% (55.2%, 79.1%)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	389	6571.8/6612 = 99.4% (98.4%, 99.8%)	6571.8/6612 = 99.4% (98.4%, 99.8%)	6520.5/6612 = 98.6% (97.4%, 99.3%)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	66	38.5/1027 = 3.8% (0.5%, 23.7%)	38.5/1027 = 3.8% (0.5%, 23.7%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	112	647.9/663 = 97.7% (84.9%, 99.7%)	647.9/663 = 97.7% (84.9%, 99.7%)	578.2/663 = 87.2% (74.5%, 94.1%)
Black or African American	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	186	1566.2/1902.4 = 82.3% (72.6%, 89.1%)	1566.2/1902.4 = 82.3% (72.6%, 89.1%)	1476.7/1902.4 = 77.6% (67.6%, 85.2%)
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	6.5/460.2 = 1.4% (0.2%, 10.3%)	6.5/460.2 = 1.4% (0.2%, 10.3%)	0/460.2 = 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	1834.2/1902.4 = 96.4% (89.2%, 98.9%)	1834.2/1902.4 = 96.4% (89.2%, 98.9%)	1766/1902.4 = 92.8% (84.7%, 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	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 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	692.7/724.7 = 95.6% (90.4%, 98.0%)	692.7/724.7 = 95.6% (90.4%, 98.0%)	647.9/724.7 = 89.4% (77.3%, 95.4%)
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	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 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	724.7/724.7 = 100.0% (100.0%, 100.0%)	724.7/724.7 = 100.0% (100.0%, 100.0%)	720.8/724.7 = 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	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 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	211.4/238.7 = 88.6% (42.3%, 98.8%)	211.4/238.7 = 88.6% (42.3%, 98.8%)	180.2/238.7 = 75.5% (37.4%, 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	0/59.5 = 0.0%	0/59.5 = 0.0%	0/59.5 = 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	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 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	0/59.5 = 0.0%	0/59.5 = 0.0%	0/59.5 = 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	170.4/197.8 = 86.2% (34.1%, 98.7%)	170.4/197.8 = 86.2% (34.1%, 98.7%)	136.3/197.8 = 68.9% (28.3%, 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	0/22 = 0.0%	0/22 = 0.0%	0/22 = 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	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 100.0% (100.0%, 100.0%)	197.8/197.8 = 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	0/22 = 0.0%	0/22 = 0.0%	0/22 = 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	402.3/504.6 = 79.7% (57.0%, 92.1%)	402.3/504.6 = 79.7% (57.0%, 92.1%)	398.4/504.6 = 79.0% (56.5%, 91.5%)
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	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 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	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 100.0% (100.0%, 100.0%)	504.6/504.6 = 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	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 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	208.4/215.2 = 96.8% (78.4%, 99.6%)	208.4/215.2 = 96.8% (78.4%, 99.6%)	173.3/215.2 = 80.5% (41.7%, 96.0%)
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	0/12.9 = 0.0%	0/12.9 = 0.0%	0/12.9 = 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	208.4/215.2 = 96.8% (78.4%, 99.6%)	208.4/215.2 = 96.8% (78.4%, 99.6%)	208.4/215.2 = 96.8% (78.4%, 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	0/12.9 = 0.0%	0/12.9 = 0.0%	0/12.9 = 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	1132.3/1261.1 = 89.8% (75.3%, 96.2%)	1132.3/1261.1 = 89.8% (75.3%, 96.2%)	990.1/1261.1 = 78.5% (63.1%, 88.7%)

(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	134.5/138 = 97.4% (82.3%, 99.7%)	134.5/138 = 97.4% (82.3%, 99.7%)	134.5/138 = 97.4% (82.3%, 99.7%)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	16	7.5/214.9 = 3.5% (0.4%, 25.2%)	7.5/214.9 = 3.5% (0.4%, 25.2%)	0/214.9 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	19	98.7/120.5 = 81.9% (40.5%, 96.8%)	98.7/120.5 = 81.9% (40.5%, 96.8%)	65.1/120.5 = 54.1% (22.7%, 82.6%)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	82	1250/1261.1 = 99.1% (93.8%, 99.9%)	1250/1261.1 = 99.1% (93.8%, 99.9%)	1231.9/1261.1 = 97.7% (92.9%, 99.3%)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	29	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	16	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	19	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 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	6083.4/6612 = 92.0% (87.5%, 95.0%)	6083.4/6612 = 92.0% (87.5%, 95.0%)	5594/6612 = 84.6% (79.2%, 88.8%)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	112	644.7/664 = 97.1% (85.8%, 99.5%)	644.7/664 = 97.1% (85.8%, 99.5%)	611.1/664 = 92.0% (81.8%, 96.7%)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	66	38.5/1027 = 3.8% (0.5%, 23.7%)	38.5/1027 = 3.8% (0.5%, 23.7%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	112	531.2/663 = 80.1% (67.1%, 88.8%)	531.2/663 = 80.1% (67.1%, 88.8%)	453.1/663 = 68.3% (55.2%, 79.1%)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	389	6571.8/6612 = 99.4% (98.4%, 99.8%)	6571.8/6612 = 99.4% (98.4%, 99.8%)	6520.5/6612 = 98.6% (97.4%, 99.3%)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	112	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)	664/664 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	66	38.5/1027 = 3.8% (0.5%, 23.7%)	38.5/1027 = 3.8% (0.5%, 23.7%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	112	647.9/663 = 97.7% (84.9%, 99.7%)	647.9/663 = 97.7% (84.9%, 99.7%)	578.2/663 = 87.2% (74.5%, 94.1%)
Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	401	3377.9/3982 = 84.8% (78.8%, 89.4%)	3377.9/3982 = 84.8% (78.8%, 89.4%)	3132.5/3982 = 78.7% (72.2%, 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	6.5/1009.6 = 0.6% (0.1%, 4.6%)	6.5/1009.6 = 0.6% (0.1%, 4.6%)	0/1009.6 = 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	3907/3982 = 98.1% (94.7%, 99.3%)	3907/3982 = 98.1% (94.7%, 99.3%)	3831/3982 = 96.2% (92.2%, 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	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 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	4711.1/5204.1 = 90.5% (84.8%, 94.2%)	4711.1/5204.1 = 90.5% (84.8%, 94.2%)	4271.5/5204.1 = 82.1% (75.2%, 87.3%)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	56	508.9/528.2 = 96.3% (82.2%, 99.3%)	508.9/528.2 = 96.3% (82.2%, 99.3%)	482.6/528.2 = 91.4% (77.9%, 96.9%)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	36	38.5/802.9 = 4.8% (0.6%, 29.9%)	38.5/802.9 = 4.8% (0.6%, 29.9%)	0/802.9 = 0.0% (0.0%, 0.0%)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	61	413.8/532.9 = 77.6% (61.5%, 88.3%)	413.8/532.9 = 77.6% (61.5%, 88.3%)	348.5/532.9 = 65.4% (49.3%, 78.6%)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	191	5171/5204.1 = 99.4% (98.0%, 99.8%)	5171/5204.1 = 99.4% (98.0%, 99.8%)	5126.9/5204.1 = 98.5% (97.0%, 99.3%)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	56	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)	528.2/528.2 = 100.0% (100.0%, 100.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	36	38.5/802.9 = 4.8% (0.6%, 29.9%)	38.5/802.9 = 4.8% (0.6%, 29.9%)	0/802.9 = 0.0% (0.0%, 0.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	61	517.8/532.9 = 97.2% (81.4%, 99.6%)	517.8/532.9 = 97.2% (81.4%, 99.6%)	450.6/532.9 = 84.6% (68.9%, 93.1%)
Age ¡ 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	184	2564.5/3137.5 = 81.7% (74.2%, 87.5%)	2564.5/3137.5 = 81.7% (74.2%, 87.5%)	2346.3/3137.5 = 74.8% (66.7%, 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	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 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	3062.5/3137.5 = 97.6% (93.3%, 99.2%)	3062.5/3137.5 = 97.6% (93.3%, 99.2%)	2994.3/3137.5 = 95.4% (90.3%, 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	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 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	813.4/844.5 = 96.3% (92.8%, 98.2%)	813.4/844.5 = 96.3% (92.8%, 98.2%)	786.1/844.5 = 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	6.5/226.5 = 2.9% (0.4%, 19.2%)	6.5/226.5 = 2.9% (0.4%, 19.2%)	0/226.5 = 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	844.5/844.5 = 100.0% (100.0%, 100.0%)	844.5/844.5 = 100.0% (100.0%, 100.0%)	836.7/844.5 = 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	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 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	1372.3/1407.8 = 97.5% (94.0%, 99.0%)	1372.3/1407.8 = 97.5% (94.0%, 99.0%)	1322.5/1407.8 = 93.9% (89.6%, 96.5%)
Age ¿= 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	56	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)	128.5/135.8 = 94.6% (84.2%, 98.3%)
Age ¿= 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	30	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 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	1400.7/1407.8 = 99.5% (96.4%, 99.9%)	1400.7/1407.8 = 99.5% (96.4%, 99.9%)	1393.6/1407.8 = 99.0% (96.0%, 99.8%)
Age ¿= 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	56	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)	135.8/135.8 = 100.0% (100.0%, 100.0%)
Age ¿= 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	30	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 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	8136.9/12410.2 = 65.6% (61.1%, 69.7%)	8136.9/12410.2 = 65.6% (61.1%, 69.7%)	6268.1/12410.2 = 50.5% (46.0%, 55.0%)
	Day 29	Vaccine	Positive	Live virus-nAb MN50	273	1053.2/1416.8 = 74.3% (66.5%, 80.9%)	1053.2/1416.8 = 74.3% (66.5%, 80.9%)	868.5/1416.8 = 61.3% (53.1%, 68.9%)
	Day 29	Placebo	Negative	Live virus-nAb MN50	155	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Positive	Live virus-nAb MN50	270	671.6/1337.3 = 50.2% (42.2%, 58.3%)	671.6/1337.3 = 50.2% (42.2%, 58.3%)	417.6/1337.3 = 31.2% (24.6%, 38.8%)
	Day 57	Vaccine	Negative	Live virus-nAb MN50	904	11702.9/12410.2 = 94.3% (91.8%, 96.1%)	11702.9/12410.2 = 94.3% (91.8%, 96.1%)	10942.9/12410.2 = 88.2% (84.8%, 90.9%)
	Day 57	Vaccine	Positive	Live virus-nAb MN50	273	1401.8/1416.8 = 98.9% (96.1%, 99.7%)	1401.8/1416.8 = 98.9% (96.1%, 99.7%)	1376.6/1416.8 = 97.2% (93.8%, 98.7%)
	Day 57	Placebo	Negative	Live virus-nAb MN50	155	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)	0/2373.7 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Positive	Live virus-nAb MN50	270	1152.2/1337.3 = 86.2% (79.4%, 91.0%)	1152.2/1337.3 = 86.2% (79.4%, 91.0%)	986.4/1337.3 = 73.8% (65.6%, 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	6081.5/9752.5 = 62.4% (56.8%, 67.6%)	6081.5/9752.5 = 62.4% (56.8%, 67.6%)	4500.9/9752.5 = 46.2% (40.6%, 51.8%)
Age ¡ 65	Day 29	Vaccine	Positive	Live virus-nAb MN50	145	805.3/1132.2 = 71.1% (61.4%, 79.2%)	805.3/1132.2 = 71.1% (61.4%, 79.2%)	643.3/1132.2 = 56.8% (46.8%, 66.3%)
Age ¡ 65	Day 29	Placebo	Negative	Live virus-nAb MN50	79	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)
Age ¡ 65	Day 29	Placebo	Positive	Live virus-nAb MN50	149	488.9/1066.3 = 45.9% (36.2%, 55.9%)	488.9/1066.3 = 45.9% (36.2%, 55.9%)	284.1/1066.3 = 26.6% (18.9%, 36.2%)
Age ¡ 65	Day 57	Vaccine	Negative	Live virus-nAb MN50	432	9143.6/9752.5 = 93.8% (90.6%, 95.9%)	9143.6/9752.5 = 93.8% (90.6%, 95.9%)	8471.6/9752.5 = 86.9% (82.6%, 90.2%)
Age ¡ 65	Day 57	Vaccine	Positive	Live virus-nAb MN50	145	1119.7/1132.2 = 98.9% (95.0%, 99.8%)	1119.7/1132.2 = 98.9% (95.0%, 99.8%)	1098.8/1132.2 = 97.1% (92.6%, 98.9%)
Age ¡ 65	Day 57	Placebo	Negative	Live virus-nAb MN50	79	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)	0/1841 = 0.0% (0.0%, 0.0%)
Age ¡ 65	Day 57	Placebo	Positive	Live virus-nAb MN50	149	896.2/1066.3 = 84.0% (75.5%, 90.0%)	896.2/1066.3 = 84.0% (75.5%, 90.0%)	745.8/1066.3 = 69.9% (59.9%, 78.4%)
Age ¿= 65	Day 29	Vaccine	Negative	Live virus-nAb MN50	472	2055.4/2657.6 = 77.3% (73.1%, 81.1%)	2055.4/2657.6 = 77.3% (73.1%, 81.1%)	1767.3/2657.6 = 66.5% (61.9%, 70.8%)
Age ¿= 65	Day 29	Vaccine	Positive	Live virus-nAb MN50	128	247.9/284.6 = 87.1% (79.9%, 92.0%)	247.9/284.6 = 87.1% (79.9%, 92.0%)	225.2/284.6 = 79.1% (71.0%, 85.5%)
Age ¿= 65	Day 29	Placebo	Negative	Live virus-nAb MN50	76	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 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	2559.3/2657.6 = 96.3% (94.0%, 97.7%)	2559.3/2657.6 = 96.3% (94.0%, 97.7%)	2471.3/2657.6 = 93.0% (90.2%, 95.0%)
Age ¿= 65	Day 57	Vaccine	Positive	Live virus-nAb MN50	128	282.1/284.6 = 99.1% (94.1%, 99.9%)	282.1/284.6 = 99.1% (94.1%, 99.9%)	277.8/284.6 = 97.6% (92.7%, 99.3%)
Age ¿= 65	Day 57	Placebo	Negative	Live virus-nAb MN50	76	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 0.0% (0.0%, 0.0%)	0/532.8 = 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	2159.1/3348.4 = 64.5% (59.7%, 69.0%)	2159.1/3348.4 = 64.5% (59.7%, 69.0%)	1690.6/3348.4 = 50.5% (45.7%, 55.3%)
At-risk	Day 29	Vaccine	Positive	Live virus-nAb MN50	126	262.1/359.5 = 72.9% (64.1%, 80.2%)	262.1/359.5 = 72.9% (64.1%, 80.2%)	241.7/359.5 = 67.2% (58.2%, 75.1%)
At-risk	Day 29	Placebo	Negative	Live virus-nAb MN50	78	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Positive	Live virus-nAb MN50	120	168.2/314.6 = 53.5% (44.1%, 62.5%)	168.2/314.6 = 53.5% (44.1%, 62.5%)	111.2/314.6 = 35.4% (27.0%, 44.7%)
At-risk	Day 57	Vaccine	Negative	Live virus-nAb MN50	460	3140.6/3348.4 = 93.8% (90.8%, 95.9%)	3140.6/3348.4 = 93.8% (90.8%, 95.9%)	2954.3/3348.4 = 88.2% (84.6%, 91.1%)
At-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	126	353.6/359.5 = 98.3% (93.3%, 99.6%)	353.6/359.5 = 98.3% (93.3%, 99.6%)	350.7/359.5 = 97.6% (92.4%, 99.2%)
At-risk	Day 57	Placebo	Negative	Live virus-nAb MN50	78	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)	0/590.5 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Positive	Live virus-nAb MN50	120	280.5/314.6 = 89.2% (81.7%, 93.8%)	280.5/314.6 = 89.2% (81.7%, 93.8%)	246.5/314.6 = 78.4% (69.6%, 85.1%)
Not at-risk	Day 29	Vaccine	Negative	Live virus-nAb MN50	444	5977.8/9061.8 = 66.0% (60.1%, 71.4%)	5977.8/9061.8 = 66.0% (60.1%, 71.4%)	4577.5/9061.8 = 50.5% (44.6%, 56.4%)
Not at-risk	Day 29	Vaccine	Positive	Live virus-nAb MN50	147	791/1057.2 = 74.8% (64.4%, 83.0%)	791/1057.2 = 74.8% (64.4%, 83.0%)	626.7/1057.2 = 59.3% (48.6%, 69.1%)
Not at-risk	Day 29	Placebo	Negative	Live virus-nAb MN50	77	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Positive	Live virus-nAb MN50	150	503.4/1022.7 = 49.2% (39.1%, 59.4%)	503.4/1022.7 = 49.2% (39.1%, 59.4%)	306.4/1022.7 = 30.0% (21.8%, 39.6%)
Not at-risk	Day 57	Vaccine	Negative	Live virus-nAb MN50	444	8562.4/9061.8 = 94.5% (91.1%, 96.6%)	8562.4/9061.8 = 94.5% (91.1%, 96.6%)	7988.6/9061.8 = 88.2% (83.6%, 91.6%)
Not at-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	147	1048.2/1057.2 = 99.1% (94.1%, 99.9%)	1048.2/1057.2 = 99.1% (94.1%, 99.9%)	1025.9/1057.2 = 97.0% (92.3%, 98.9%)
Not at-risk	Day 57	Placebo	Negative	Live virus-nAb MN50	77	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)	0/1783.2 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Positive	Live virus-nAb MN50	150	871.6/1022.7 = 85.2% (76.3%, 91.2%)	871.6/1022.7 = 85.2% (76.3%, 91.2%)	739.9/1022.7 = 72.3% (61.9%, 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	1149.5/1993.3 = 57.7% (50.8%, 64.3%)	1149.5/1993.3 = 57.7% (50.8%, 64.3%)	837/1993.3 = 42.0% (35.4%, 48.9%)
Age ¡ 65 At-risk	Day 29	Vaccine	Positive	Live virus-nAb MN50	73	160.9/240 = 67.1% (55.1%, 77.1%)	160.9/240 = 67.1% (55.1%, 77.1%)	145.4/240 = 60.6% (48.6%, 71.4%)
Age ¡ 65 At-risk	Day 29	Placebo	Negative	Live virus-nAb MN50	39	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)
Age ¡ 65 At-risk	Day 29	Placebo	Positive	Live virus-nAb MN50	75	107/211.7 = 50.5% (38.9%, 62.1%)	107/211.7 = 50.5% (38.9%, 62.1%)	70.2/211.7 = 33.2% (23.1%, 45.1%)
Age ¡ 65 At-risk	Day 57	Vaccine	Negative	Live virus-nAb MN50	216	1829.4/1993.3 = 91.8% (86.9%, 94.9%)	1829.4/1993.3 = 91.8% (86.9%, 94.9%)	1702.1/1993.3 = 85.4% (79.8%, 89.7%)
Age ¡ 65 At-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	73	236.4/240 = 98.5% (89.9%, 99.8%)	236.4/240 = 98.5% (89.9%, 99.8%)	233.6/240 = 97.3% (89.5%, 99.4%)
Age ¡ 65 At-risk	Day 57	Placebo	Negative	Live virus-nAb MN50	39	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)	0/318.2 = 0.0% (0.0%, 0.0%)
Age ¡ 65 At-risk	Day 57	Placebo	Positive	Live virus-nAb MN50	75	179.4/211.7 = 84.8% (74.1%, 91.6%)	179.4/211.7 = 84.8% (74.1%, 91.6%)	158.2/211.7 = 74.7% (63.2%, 83.6%)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Negative	Live virus-nAb MN50	216	4932/7759.3 = 63.6% (56.8%, 69.8%)	4932/7759.3 = 63.6% (56.8%, 69.8%)	3663.8/7759.3 = 47.2% (40.5%, 54.1%)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Positive	Live virus-nAb MN50	72	644.4/892.2 = 72.2% (60.0%, 81.9%)	644.4/892.2 = 72.2% (60.0%, 81.9%)	497.9/892.2 = 55.8% (43.4%, 67.5%)
Age ¡ 65 Not at-risk	Day 29	Placebo	Negative	Live virus-nAb MN50	40	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Not at-risk	Day 29	Placebo	Positive	Live virus-nAb MN50	74	382/854.6 = 44.7% (33.0%, 57.0%)	382/854.6 = 44.7% (33.0%, 57.0%)	213.9/854.6 = 25.0% (16.0%, 37.0%)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Negative	Live virus-nAb MN50	216	7314.2/7759.3 = 94.3% (90.2%, 96.7%)	7314.2/7759.3 = 94.3% (90.2%, 96.7%)	6769.5/7759.3 = 87.2% (82.0%, 91.2%)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	72	883.2/892.2 = 99.0% (92.9%, 99.9%)	883.2/892.2 = 99.0% (92.9%, 99.9%)	865.2/892.2 = 97.0% (91.0%, 99.0%)
Age ¡ 65 Not at-risk	Day 57	Placebo	Negative	Live virus-nAb MN50	40	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 0.0% (0.0%, 0.0%)	0/1522.8 = 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	716.8/854.6 = 83.9% (73.1%, 90.9%)	716.8/854.6 = 83.9% (73.1%, 90.9%)	587.6/854.6 = 68.8% (56.4%, 78.9%)
Age ¿= 65 At-risk	Day 29	Vaccine	Negative	Live virus-nAb MN50	244	1009.6/1355.1 = 74.5% (68.3%, 79.9%)	1009.6/1355.1 = 74.5% (68.3%, 79.9%)	853.6/1355.1 = 63.0% (56.4%, 69.1%)
Age ¿= 65 At-risk	Day 29	Vaccine	Positive	Live virus-nAb MN50	53	101.2/119.6 = 84.7% (71.5%, 92.4%)	101.2/119.6 = 84.7% (71.5%, 92.4%)	96.4/119.6 = 80.6% (67.0%, 89.5%)
Age ¿= 65 At-risk	Day 29	Placebo	Negative	Live virus-nAb MN50	39	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 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	1311.1/1355.1 = 96.8% (93.4%, 98.4%)	1311.1/1355.1 = 96.8% (93.4%, 98.4%)	1252.2/1355.1 = 92.4% (88.1%, 95.2%)
Age ¿= 65 At-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	53	117.1/119.6 = 98.0% (86.2%, 99.7%)	117.1/119.6 = 98.0% (86.2%, 99.7%)	117.1/119.6 = 98.0% (86.2%, 99.7%)
Age ¿= 65 At-risk	Day 57	Placebo	Negative	Live virus-nAb MN50	39	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 0.0% (0.0%, 0.0%)	0/272.3 = 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	1045.7/1302.5 = 80.3% (74.2%, 85.2%)	1045.7/1302.5 = 80.3% (74.2%, 85.2%)	913.7/1302.5 = 70.1% (63.5%, 76.0%)
Age ¿= 65 Not at-risk	Day 29	Vaccine	Positive	Live virus-nAb MN50	75	146.7/165 = 88.9% (79.0%, 94.4%)	146.7/165 = 88.9% (79.0%, 94.4%)	128.8/165 = 78.1% (66.9%, 86.3%)
Age ¿= 65 Not at-risk	Day 29	Placebo	Negative	Live virus-nAb MN50	37	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 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	1248.2/1302.5 = 95.8% (92.0%, 97.9%)	1248.2/1302.5 = 95.8% (92.0%, 97.9%)	1219.1/1302.5 = 93.6% (89.3%, 96.3%)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	75	165/165 = 100.0% (100.0%, 100.0%)	165/165 = 100.0% (100.0%, 100.0%)	160.7/165 = 97.4% (89.6%, 99.4%)
Age ¿= 65 Not at-risk	Day 57	Placebo	Negative	Live virus-nAb MN50	37	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 0.0% (0.0%, 0.0%)	0/260.4 = 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	4562.5/6958.3 = 65.6% (59.6%, 71.1%)	4562.5/6958.3 = 65.6% (59.6%, 71.1%)	3430.4/6958.3 = 49.3% (43.3%, 55.3%)
Female	Day 29	Vaccine	Positive	Live virus-nAb MN50	149	552/763.9 = 72.3% (61.0%, 81.3%)	552/763.9 = 72.3% (61.0%, 81.3%)	462.4/763.9 = 60.5% (49.4%, 70.7%)
Female	Day 29	Placebo	Negative	Live virus-nAb MN50	85	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Positive	Live virus-nAb MN50	149	393.5/800.5 = 49.2% (38.4%, 60.0%)	393.5/800.5 = 49.2% (38.4%, 60.0%)	221/800.5 = 27.6% (19.4%, 37.7%)
Female	Day 57	Vaccine	Negative	Live virus-nAb MN50	511	6510.3/6958.3 = 93.6% (89.8%, 96.0%)	6510.3/6958.3 = 93.6% (89.8%, 96.0%)	6075.8/6958.3 = 87.3% (82.5%, 90.9%)
Female	Day 57	Vaccine	Positive	Live virus-nAb MN50	149	760.4/763.9 = 99.5% (96.7%, 99.9%)	760.4/763.9 = 99.5% (96.7%, 99.9%)	749.5/763.9 = 98.1% (92.9%, 99.5%)
Female	Day 57	Placebo	Negative	Live virus-nAb MN50	85	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)	0/1307.2 = 0.0% (0.0%, 0.0%)
Female	Day 57	Placebo	Positive	Live virus-nAb MN50	149	672.3/800.5 = 84.0% (74.0%, 90.6%)	672.3/800.5 = 84.0% (74.0%, 90.6%)	553.5/800.5 = 69.1% (57.7%, 78.6%)
Male	Day 29	Vaccine	Negative	Live virus-nAb MN50	393	3574.3/5451.9 = 65.6% (58.7%, 71.8%)	3574.3/5451.9 = 65.6% (58.7%, 71.8%)	2837.7/5451.9 = 52.1% (45.2%, 58.8%)
Male	Day 29	Vaccine	Positive	Live virus-nAb MN50	124	501.2/652.9 = 76.8% (64.8%, 85.6%)	501.2/652.9 = 76.8% (64.8%, 85.6%)	406/652.9 = 62.2% (49.6%, 73.3%)
Male	Day 29	Placebo	Negative	Live virus-nAb MN50	70	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Positive	Live virus-nAb MN50	121	278.1/536.8 = 51.8% (39.7%, 63.7%)	278.1/536.8 = 51.8% (39.7%, 63.7%)	196.7/536.8 = 36.6% (26.1%, 48.7%)
Male	Day 57	Vaccine	Negative	Live virus-nAb MN50	393	5192.7/5451.9 = 95.2% (91.5%, 97.4%)	5192.7/5451.9 = 95.2% (91.5%, 97.4%)	4867.1/5451.9 = 89.3% (84.2%, 92.9%)
Male	Day 57	Vaccine	Positive	Live virus-nAb MN50	124	641.4/652.9 = 98.3% (91.6%, 99.7%)	641.4/652.9 = 98.3% (91.6%, 99.7%)	627.2/652.9 = 96.1% (89.6%, 98.6%)
Male	Day 57	Placebo	Negative	Live virus-nAb MN50	70	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)	0/1066.6 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Positive	Live virus-nAb MN50	121	479.9/536.8 = 89.4% (79.0%, 95.0%)	479.9/536.8 = 89.4% (79.0%, 95.0%)	432.9/536.8 = 80.6% (68.9%, 88.7%)

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 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	3407.3/5478.9 = 62.2% (54.8%, 69.1%)	3407.3/5478.9 = 62.2% (54.8%, 69.1%)	2455.8/5478.9 = 44.8% (37.5%, 52.4%)
Age ¡ 65 Female	Day 29	Vaccine	Positive	Live virus-nAb MN50	77	408.9/603.5 = 67.8% (53.8%, 79.1%)	408.9/603.5 = 67.8% (53.8%, 79.1%)	330.4/603.5 = 54.8% (41.2%, 67.6%)
Age ¡ 65 Female	Day 29	Placebo	Negative	Live virus-nAb MN50	45	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Female	Day 29	Placebo	Positive	Live virus-nAb MN50	89	311.2/667 = 46.7% (34.2%, 59.6%)	311.2/667 = 46.7% (34.2%, 59.6%)	167/667 = 25.0% (15.8%, 37.3%)
Age ¡ 65 Female	Day 57	Vaccine	Negative	Live virus-nAb MN50	245	5100.1/5478.9 = 93.1% (88.2%, 96.0%)	5100.1/5478.9 = 93.1% (88.2%, 96.0%)	4709.7/5478.9 = 86.0% (79.9%, 90.4%)
Age ¡ 65 Female	Day 57	Vaccine	Positive	Live virus-nAb MN50	77	600/603.5 = 99.4% (95.8%, 99.9%)	600/603.5 = 99.4% (95.8%, 99.9%)	591/603.5 = 97.9% (90.8%, 99.6%)
Age ¡ 65 Female	Day 57	Placebo	Negative	Live virus-nAb MN50	45	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)	0/1028.3 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Female	Day 57	Placebo	Positive	Live virus-nAb MN50	89	543.2/667 = 81.4% (69.5%, 89.4%)	543.2/667 = 81.4% (69.5%, 89.4%)	434.6/667 = 65.2% (51.7%, 76.6%)
Age ¡ 65 Male	Day 29	Vaccine	Negative	Live virus-nAb MN50	187	2674.2/4273.6 = 62.6% (54.1%, 70.4%)	2674.2/4273.6 = 62.6% (54.1%, 70.4%)	2045/4273.6 = 47.9% (39.5%, 56.4%)
Age ¡ 65 Male	Day 29	Vaccine	Positive	Live virus-nAb MN50	68	396.4/528.7 = 75.0% (60.2%, 85.6%)	396.4/528.7 = 75.0% (60.2%, 85.6%)	312.8/528.7 = 59.2% (44.0%, 72.8%)
Age ¡ 65 Male	Day 29	Placebo	Negative	Live virus-nAb MN50	34	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Male	Day 29	Placebo	Positive	Live virus-nAb MN50	60	177.7/399.3 = 44.5% (29.5%, 60.6%)	177.7/399.3 = 44.5% (29.5%, 60.6%)	117.1/399.3 = 29.3% (16.8%, 46.1%)
Age ¡ 65 Male	Day 57	Vaccine	Negative	Live virus-nAb MN50	187	4043.5/4273.6 = 94.6% (89.8%, 97.2%)	4043.5/4273.6 = 94.6% (89.8%, 97.2%)	3761.9/4273.6 = 88.0% (81.5%, 92.5%)
Age ¡ 65 Male	Day 57	Vaccine	Positive	Live virus-nAb MN50	68	519.7/528.7 = 98.3% (88.3%, 99.8%)	519.7/528.7 = 98.3% (88.3%, 99.8%)	507.8/528.7 = 96.1% (87.4%, 98.8%)
Age ¡ 65 Male	Day 57	Placebo	Negative	Live virus-nAb MN50	34	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)	0/812.7 = 0.0% (0.0%, 0.0%)
Age ¡ 65 Male	Day 57	Placebo	Positive	Live virus-nAb MN50	60	353/399.3 = 88.4% (74.0%, 95.3%)	353/399.3 = 88.4% (74.0%, 95.3%)	311.2/399.3 = 77.9% (62.2%, 88.3%)
Age ¿= 65 Female	Day 29	Vaccine	Negative	Live virus-nAb MN50	266	1155.2/1479.4 = 78.1% (72.4%, 82.9%)	1155.2/1479.4 = 78.1% (72.4%, 82.9%)	974.6/1479.4 = 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	143.1/160.4 = 89.2% (79.4%, 94.7%)	143.1/160.4 = 89.2% (79.4%, 94.7%)	132/160.4 = 82.3% (71.4%, 89.7%)
Age ¿= 65 Female	Day 29	Placebo	Negative	Live virus-nAb MN50	40	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 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	1410.1/1479.4 = 95.3% (91.7%, 97.4%)	1410.1/1479.4 = 95.3% (91.7%, 97.4%)	1366.1/1479.4 = 92.3% (88.2%, 95.1%)
Age ¿= 65 Female	Day 57	Vaccine	Positive	Live virus-nAb MN50	72	160.4/160.4 = 100.0% (100.0%, 100.0%)	160.4/160.4 = 100.0% (100.0%, 100.0%)	158.5/160.4 = 98.8% (91.7%, 99.8%)
Age ¿= 65 Female	Day 57	Placebo	Negative	Live virus-nAb MN50	40	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 0.0% (0.0%, 0.0%)	0/278.8 = 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	900.1/1178.3 = 76.4% (69.7%, 82.0%)	900.1/1178.3 = 76.4% (69.7%, 82.0%)	792.7/1178.3 = 67.3% (60.2%, 73.6%)
Age ¿= 65 Male	Day 29	Vaccine	Positive	Live virus-nAb MN50	56	104.8/124.2 = 84.4% (71.9%, 91.9%)	104.8/124.2 = 84.4% (71.9%, 91.9%)	93.2/124.2 = 75.0% (62.0%, 84.7%)
Age ¿= 65 Male	Day 29	Placebo	Negative	Live virus-nAb MN50	36	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 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	1149.2/1178.3 = 97.5% (94.0%, 99.0%)	1149.2/1178.3 = 97.5% (94.0%, 99.0%)	1105.1/1178.3 = 93.8% (89.3%, 96.5%)
Age ¿= 65 Male	Day 57	Vaccine	Positive	Live virus-nAb MN50	56	121.8/124.2 = 98.0% (86.7%, 99.7%)	121.8/124.2 = 98.0% (86.7%, 99.7%)	119.4/124.2 = 96.1% (85.2%, 99.1%)
Age ¿= 65 Male	Day 57	Placebo	Negative	Live virus-nAb MN50	36	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 0.0% (0.0%, 0.0%)	0/253.9 = 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	568.7/1003.1 = 56.7% (43.2%, 69.2%)	568.7/1003.1 = 56.7% (43.2%, 69.2%)	406.9/1003.1 = 40.6% (29.1%, 53.2%)
Hispanic or Latino	Day 29	Vaccine	Positive	Live virus-nAb MN50	38	148.8/181.5 = 82.0% (59.6%, 93.3%)	148.8/181.5 = 82.0% (59.6%, 93.3%)	128.9/181.5 = 71.0% (48.9%, 86.3%)
Hispanic or Latino	Day 29	Placebo	Negative	Live virus-nAb MN50	20	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 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	964.1/1003.1 = 96.1% (84.8%, 99.1%)	964.1/1003.1 = 96.1% (84.8%, 99.1%)	867.6/1003.1 = 86.5% (72.8%, 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	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 0.0% (0.0%, 0.0%)	0/323.2 = 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	6927.7/10413.1 = 66.5% (61.6%, 71.1%)	6927.7/10413.1 = 66.5% (61.6%, 71.1%)	5338.4/10413.1 = 51.3% (46.3%, 56.2%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Live virus-nAb MN50	208	795.6/1083.5 = 73.4% (64.3%, 80.9%)	795.6/1083.5 = 73.4% (64.3%, 80.9%)	636/1083.5 = 58.7% (49.1%, 67.7%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Live virus-nAb MN50	119	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Live virus-nAb MN50	198	508.5/1016.5 = 50.0% (40.6%, 59.4%)	508.5/1016.5 = 50.0% (40.6%, 59.4%)	328.5/1016.5 = 32.3% (24.4%, 41.4%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Live virus-nAb MN50	723	9832.7/10413.1 = 94.4% (91.7%, 96.3%)	9832.7/10413.1 = 94.4% (91.7%, 96.3%)	9191.2/10413.1 = 88.3% (84.6%, 91.2%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Live virus-nAb MN50	208	1068.5/1083.5 = 98.6% (95.0%, 99.6%)	1068.5/1083.5 = 98.6% (95.0%, 99.6%)	1052.4/1083.5 = 97.1% (93.2%, 98.8%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Live virus-nAb MN50	119	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)	0/1750.4 = 0.0% (0.0%, 0.0%)

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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	886.9/1016.5 = 87.2% (79.2%, 92.5%)	886.9/1016.5 = 87.2% (79.2%, 92.5%)	768.5/1016.5 = 75.6% (66.1%, 83.1%)
Not reported and unknown	Day 29	Vaccine	Negative	Live virus-nAb MN50	69	640.5/994 = 64.4% (46.4%, 79.2%)	640.5/994 = 64.4% (46.4%, 79.2%)	522.9/994 = 52.6% (35.4%, 69.2%)
Not reported and unknown	Day 29	Vaccine	Positive	Live virus-nAb MN50	27	108.8/151.8 = 71.7% (37.3%, 91.5%)	108.8/151.8 = 71.7% (37.3%, 91.5%)	103.5/151.8 = 68.2% (35.2%, 89.5%)
Not reported and unknown	Day 29	Placebo	Negative	Live virus-nAb MN50	16	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Positive	Live virus-nAb MN50	27	88.2/154.1 = 57.2% (29.5%, 81.0%)	88.2/154.1 = 57.2% (29.5%, 81.0%)	40.1/154.1 = 26.0% (9.3%, 54.7%)
Not reported and unknown	Day 57	Vaccine	Negative	Live virus-nAb MN50	69	906.2/994 = 91.2% (73.8%, 97.4%)	906.2/994 = 91.2% (73.8%, 97.4%)	884.1/994 = 88.9% (72.8%, 96.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Live virus-nAb MN50	27	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)	151.8/151.8 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Live virus-nAb MN50	16	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)	0/300.1 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Positive	Live virus-nAb MN50	27	116.4/154.1 = 75.5% (49.7%, 90.6%)	116.4/154.1 = 75.5% (49.7%, 90.6%)	83.6/154.1 = 54.3% (27.7%, 78.6%)

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 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	4531.8/6612 = 68.5% (62.1%, 74.4%)	4531.8/6612 = 68.5% (62.1%, 74.4%)	3506.9/6612 = 53.0% (46.4%, 59.6%)
White Non-Hispanic	Day 29	Vaccine	Positive	Live virus-nAb MN50	112	486/664 = 73.2% (60.3%, 83.0%)	486/664 = 73.2% (60.3%, 83.0%)	373.2/664 = 56.2% (43.1%, 68.5%)
White Non-Hispanic	Day 29	Placebo	Negative	Live virus-nAb MN50	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Live virus-nAb MN50	112	319.5/663 = 48.2% (35.9%, 60.7%)	319.5/663 = 48.2% (35.9%, 60.7%)	201/663 = 30.3% (20.4%, 42.5%)
White Non-Hispanic	Day 57	Vaccine	Negative	Live virus-nAb MN50	389	6226.1/6612 = 94.2% (90.3%, 96.5%)	6226.1/6612 = 94.2% (90.3%, 96.5%)	5793.7/6612 = 87.6% (82.4%, 91.4%)
White Non-Hispanic	Day 57	Vaccine	Positive	Live virus-nAb MN50	112	658.1/664 = 99.1% (96.3%, 99.8%)	658.1/664 = 99.1% (96.3%, 99.8%)	655.7/664 = 98.7% (96.0%, 99.6%)
White Non-Hispanic	Day 57	Placebo	Negative	Live virus-nAb MN50	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Live virus-nAb MN50	112	575/663 = 86.7% (75.1%, 93.4%)	575/663 = 86.7% (75.1%, 93.4%)	495.1/663 = 74.7% (61.7%, 84.4%)
Black or African American	Day 29	Vaccine	Negative	Live virus-nAb MN50	186	1146.4/1902.4 = 60.3% (50.0%, 69.7%)	1146.4/1902.4 = 60.3% (50.0%, 69.7%)	860.9/1902.4 = 45.3% (35.8%, 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	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 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	1720.1/1902.4 = 90.4% (81.5%, 95.3%)	1720.1/1902.4 = 90.4% (81.5%, 95.3%)	1602.4/1902.4 = 84.2% (75.0%, 90.5%)

(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	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 0.0% (0.0%, 0.0%)	0/460.2 = 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	459.8/724.7 = 63.4% (46.2%, 77.8%)	459.8/724.7 = 63.4% (46.2%, 77.8%)	375/724.7 = 51.7% (35.5%, 67.7%)
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	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 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	711.2/724.7 = 98.1% (92.9%, 99.5%)	711.2/724.7 = 98.1% (92.9%, 99.5%)	669.3/724.7 = 92.3% (79.0%, 97.5%)
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	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 0.0% (0.0%, 0.0%)	0/135.8 = 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	121.7/238.7 = 51.0% (23.5%, 77.9%)	121.7/238.7 = 51.0% (23.5%, 77.9%)	68.1/238.7 = 28.5% (10.3%, 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	0/59.5 = 0.0%	0/59.5 = 0.0%	0/59.5 = 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	238.7/238.7 = 100.0% (100.0%, 100.0%)	238.7/238.7 = 100.0% (100.0%, 100.0%)	234.8/238.7 = 98.4% (87.9%, 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	0/59.5 = 0.0%	0/59.5 = 0.0%	0/59.5 = 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	184.2/197.8 = 93.1% (76.8%, 98.2%)	184.2/197.8 = 93.1% (76.8%, 98.2%)	125.7/197.8 = 63.5% (25.6%, 89.8%)
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	0/22 = 0.0%	0/22 = 0.0%	0/22 = 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	193.9/197.8 = 98.0% (84.8%, 99.8%)	193.9/197.8 = 98.0% (84.8%, 99.8%)	193.9/197.8 = 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	0/22 = 0.0%	0/22 = 0.0%	0/22 = 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	315.6/504.6 = 62.6% (41.5%, 79.7%)	315.6/504.6 = 62.6% (41.5%, 79.7%)	230.9/504.6 = 45.8% (27.2%, 65.6%)
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	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 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	473.4/504.6 = 93.8% (69.5%, 99.0%)	473.4/504.6 = 93.8% (69.5%, 99.0%)	439.3/504.6 = 87.1% (64.0%, 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	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 0.0% (0.0%, 0.0%)	0/268.9 = 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	128.5/215.2 = 59.7% (27.9%, 85.0%)	128.5/215.2 = 59.7% (27.9%, 85.0%)	97.3/215.2 = 45.2% (20.6%, 72.4%)
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	0/12.9 = 0.0%	0/12.9 = 0.0%	0/12.9 = 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	211.3/215.2 = 98.2% (86.8%, 99.8%)	211.3/215.2 = 98.2% (86.8%, 99.8%)	184/215.2 = 85.5% (41.0%, 98.0%)
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	0/12.9 = 0.0%	0/12.9 = 0.0%	0/12.9 = 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	784.2/1261.1 = 62.2% (46.6%, 75.6%)	784.2/1261.1 = 62.2% (46.6%, 75.6%)	652.2/1261.1 = 51.7% (36.8%, 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	106.8/138 = 77.4% (44.5%, 93.6%)	106.8/138 = 77.4% (44.5%, 93.6%)	87.5/138 = 63.4% (33.1%, 85.8%)
Not reported and unknown	Day 29	Placebo	Negative	Live virus-nAb MN50	16	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Positive	Live virus-nAb MN50	19	57.4/120.5 = 47.6% (18.5%, 78.4%)	57.4/120.5 = 47.6% (18.5%, 78.4%)	33.8/120.5 = 28.1% (8.5%, 62.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Live virus-nAb MN50	82	1239/1261.1 = 98.2% (93.3%, 99.6%)	1239/1261.1 = 98.2% (93.3%, 99.6%)	1178.5/1261.1 = 93.5% (81.1%, 97.9%)
Not reported and unknown	Day 57	Vaccine	Positive	Live virus-nAb MN50	29	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)	138/138 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Live virus-nAb MN50	16	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)	0/214.9 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Positive	Live virus-nAb MN50	19	120.5/120.5 = 100.0% (100.0%, 100.0%)	120.5/120.5 = 100.0% (100.0%, 100.0%)	94.2/120.5 = 78.2% (38.7%, 95.3%)

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

Table 4i. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for 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	4531.8/6612 = 68.5% (62.1%, 74.4%)	4531.8/6612 = 68.5% (62.1%, 74.4%)	3506.9/6612 = 53.0% (46.4%, 59.6%)
White Non-Hispanic	Day 29	Vaccine	Positive	Live virus-nAb MN50	112	486/664 = 73.2% (60.3%, 83.0%)	486/664 = 73.2% (60.3%, 83.0%)	373.2/664 = 56.2% (43.1%, 68.5%)
White Non-Hispanic	Day 29	Placebo	Negative	Live virus-nAb MN50	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Live virus-nAb MN50	112	319.5/663 = 48.2% (35.9%, 60.7%)	319.5/663 = 48.2% (35.9%, 60.7%)	201/663 = 30.3% (20.4%, 42.5%)
White Non-Hispanic	Day 57	Vaccine	Negative	Live virus-nAb MN50	389	6226.1/6612 = 94.2% (90.3%, 96.5%)	6226.1/6612 = 94.2% (90.3%, 96.5%)	5793.7/6612 = 87.6% (82.4%, 91.4%)
White Non-Hispanic	Day 57	Vaccine	Positive	Live virus-nAb MN50	112	658.1/664 = 99.1% (96.3%, 99.8%)	658.1/664 = 99.1% (96.3%, 99.8%)	655.7/664 = 98.7% (96.0%, 99.6%)
White Non-Hispanic	Day 57	Placebo	Negative	Live virus-nAb MN50	66	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)	0/1027 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Live virus-nAb MN50	112	575/663 = 86.7% (75.1%, 93.4%)	575/663 = 86.7% (75.1%, 93.4%)	495.1/663 = 74.7% (61.7%, 84.4%)
Communities of Color	Day 29	Vaccine	Negative	Live virus-nAb MN50	401	2457.4/3982 = 61.7% (54.8%, 68.2%)	2457.4/3982 = 61.7% (54.8%, 68.2%)	1821/3982 = 45.7% (39.2%, 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	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 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	3743.2/3982 = 94.0% (89.3%, 96.7%)	3743.2/3982 = 94.0% (89.3%, 96.7%)	3487.1/3982 = 87.6% (82.0%, 91.6%)
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	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 0.0% (0.0%, 0.0%)	0/1009.6 = 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	3451/5204.1 = 66.3% (58.2%, 73.5%)	3451/5204.1 = 66.3% (58.2%, 73.5%)	2575.4/5204.1 = 49.5% (41.3%, 57.7%)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Live virus-nAb MN50	56	372/528.2 = 70.4% (54.4%, 82.6%)	372/528.2 = 70.4% (54.4%, 82.6%)	273.8/528.2 = 51.8% (35.9%, 67.4%)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Negative	Live virus-nAb MN50	36	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Positive	Live virus-nAb MN50	61	237.9/532.9 = 44.6% (30.0%, 60.2%)	237.9/532.9 = 44.6% (30.0%, 60.2%)	142.3/532.9 = 26.7% (15.3%, 42.3%)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Live virus-nAb MN50	191	4882.2/5204.1 = 93.8% (88.9%, 96.6%)	4882.2/5204.1 = 93.8% (88.9%, 96.6%)	4499.6/5204.1 = 86.5% (79.8%, 91.2%)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Live virus-nAb MN50	56	524.7/528.2 = 99.3% (95.2%, 99.9%)	524.7/528.2 = 99.3% (95.2%, 99.9%)	524.7/528.2 = 99.3% (95.2%, 99.9%)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Negative	Live virus-nAb MN50	36	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)	0/802.9 = 0.0% (0.0%, 0.0%)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Positive	Live virus-nAb MN50	61	452.5/532.9 = 84.9% (70.3%, 93.0%)	452.5/532.9 = 84.9% (70.3%, 93.0%)	385.4/532.9 = 72.3% (56.3%, 84.1%)
Age ¡ 65 Communities of Color	Day 29	Vaccine	Negative	Live virus-nAb MN50	184	1753/3137.5 = 55.9% (47.3%, 64.1%)	1753/3137.5 = 55.9% (47.3%, 64.1%)	1241.1/3137.5 = 39.6% (31.6%, 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	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 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	2925.9/3137.5 = 93.3% (87.2%, 96.6%)	2925.9/3137.5 = 93.3% (87.2%, 96.6%)	2700.9/3137.5 = 86.1% (79.0%, 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	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 0.0% (0.0%, 0.0%)	0/783.1 = 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	704.4/844.5 = 83.4% (77.8%, 87.8%)	704.4/844.5 = 83.4% (77.8%, 87.8%)	579.9/844.5 = 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	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 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	817.3/844.5 = 96.8% (93.4%, 98.5%)	817.3/844.5 = 96.8% (93.4%, 98.5%)	786.1/844.5 = 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	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 0.0% (0.0%, 0.0%)	0/226.5 = 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	1080.8/1407.8 = 76.8% (70.3%, 82.2%)	1080.8/1407.8 = 76.8% (70.3%, 82.2%)	931.4/1407.8 = 66.2% (59.2%, 72.5%)
Age ¿= 65 White Non-Hispanic	Day 29	Vaccine	Positive	Live virus-nAb MN50	56	114/135.8 = 83.9% (71.4%, 91.6%)	114/135.8 = 83.9% (71.4%, 91.6%)	99.4/135.8 = 73.2% (59.8%, 83.4%)
Age ¿= 65 White Non-Hispanic	Day 29	Placebo	Negative	Live virus-nAb MN50	30	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 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	1343.8/1407.8 = 95.5% (91.5%, 97.6%)	1343.8/1407.8 = 95.5% (91.5%, 97.6%)	1294.1/1407.8 = 91.9% (87.2%, 95.0%)
Age ¿= 65 White Non-Hispanic	Day 57	Vaccine	Positive	Live virus-nAb MN50	56	133.4/135.8 = 98.2% (87.7%, 99.8%)	133.4/135.8 = 98.2% (87.7%, 99.8%)	130.9/135.8 = 96.4% (86.3%, 99.1%)
Age ¿= 65 White Non-Hispanic	Day 57	Placebo	Negative	Live virus-nAb MN50	30	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 0.0% (0.0%, 0.0%)	0/224.1 = 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	24220 (20801, 28202)
	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	904	24778 (21610, 28411)
	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	904	46301 (41313, 51891)
	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	217 (186, 253)
	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	273	38929 (28974, 52304)
	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	273	40407 (31177, 52370)
	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	273	80434 (65269, 99124)
	Day 29	Vaccine	Positive	Live virus-nAb MN50	273	210 (164, 269)
	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	273	173 (132, 227)
	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	12225 (9438, 15835)
	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	270	11927 (9430, 15085)
	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	270	18081 (15037, 21741)
	Day 29	Placebo	Positive	Live virus-nAb MN50	270	88 (71, 108)
	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	270	51 (40, 65)
	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	270	150 (114, 198)
	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	904	402190 (335224, 482533)
	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	904	1074131 (934344, 1234832)
	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	904	2349481 (2085980, 2646267)
	Day 57	Vaccine	Negative	Live virus-nAb MN50	904	1465 (1241, 1728)
	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	904	1784 (1481, 2148)
	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	904	2900 (2421, 3473)
	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	273	860317 (615674, 1202171)
	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	273	2681811 (2105403, 3416023)
	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	273	5800314 (4839344, 6952107)
	Day 57	Vaccine	Positive	Live virus-nAb MN50	273	3827 (3024, 4843)
	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	273	4749 (3360, 6714)
	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	273	7806 (5412, 11259)
	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	150527 (109098, 207686)
	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	270	462227 (354280, 603065)
	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	270	723728 (582826, 898695)
	Day 57	Placebo	Positive	Live virus-nAb MN50	270	595 (443, 799)
	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	270	521 (364, 746)
	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	270	1714 (1251, 2350)

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	18658 (15448, 22535)
Age ¡ 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	18570 (15669, 22007)
Age ¡ 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	35143 (30513, 40475)
Age ¡ 65	Day 29	Vaccine	Negative	Live virus-nAb MN50	432	129 (111, 152)
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, 216)
Age ¡ 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	145	30497 (21247, 43773)
Age ¡ 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	145	31564 (22945, 43423)
Age ¡ 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	145	61982 (47941, 80136)
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, 190)
Age ¡ 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	145	273 (194, 383)
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, 5)
Age ¡ 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	149	9585 (7004, 13117)
Age ¡ 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	149	8824 (6622, 11759)
Age ¡ 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	149	13814 (11019, 17316)
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, 180)
Age ¡ 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	432	307742 (245520, 385733)
Age ¡ 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	808208 (680044, 960528)
Age ¡ 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	1822080 (1572698, 2111007)
Age ¡ 65	Day 57	Vaccine	Negative	Live virus-nAb MN50	432	1209 (984, 1484)
Age ¡ 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	432	1347 (1070, 1694)
Age ¡ 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	432	2347 (1879, 2933)
Age ¡ 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	145	636064 (421509, 959832)
Age ¡ 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	145	2129806 (1580185, 2870596)
Age ¡ 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	145	4719631 (3771941, 5905425)
Age ¡ 65	Day 57	Vaccine	Positive	Live virus-nAb MN50	145	3328 (2496, 4437)
Age ¡ 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	145	3392 (2228, 5165)
Age ¡ 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	145	6035 (3851, 9458)
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	109167 (73580, 161968)
Age ¡ 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	149	335691 (242201, 465269)
Age ¡ 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	149	520333 (398930, 678681)
Age ¡ 65	Day 57	Placebo	Positive	Live virus-nAb MN50	149	456 (318, 653)
Age ¡ 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	149	358 (231, 555)
Age ¡ 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	149	1432 (977, 2099)
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	63096 (53856, 73923)
Age ¿= 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	472	71407 (62056, 82168)
Age ¿= 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	472	127358 (112877, 143697)
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	447 (378, 528)
Age ¿= 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	128	102819 (75618, 139805)
Age ¿= 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	107940 (85062, 136972)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Age ¿= 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	226833 (186901, 275296)
Age ¿= 65	Day 29	Vaccine	Positive	Live virus-nAb MN50	128	440 (335, 578)
Age ¿= 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	128	438 (326, 589)
Age ¿= 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	128	783 (585, 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	1074000 (887932, 1299059)
Age ¿= 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	472	3050568 (2626433, 3543196)
Age ¿= 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	472	5971935 (5245378, 6799131)
Age ¿= 65	Day 57	Vaccine	Negative	Live virus-nAb MN50	472	2964 (2499, 3517)
Age ¿= 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	472	5003 (4056, 6170)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Age ¿= 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	472	6297 (5132, 7727)
Age ¿= 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	128	2860668 (2102225, 3892742)
Age ¿= 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	6708518 (5477341, 8216434)
Age ¿= 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	13173416 (11520206, 15063871)
Age ¿= 65	Day 57	Vaccine	Positive	Live virus-nAb MN50	128	6671 (5177, 8596)
Age ¿= 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	128	18112 (11950, 27452)
Age ¿= 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	128	21727 (15143, 31174)
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	24877 (21066, 29377)
At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	460	25704 (21957, 30089)
At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	460	48231 (42255, 55054)
At-risk	Day 29	Vaccine	Negative	Live virus-nAb MN50	460	148 (129, 170)
At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	460	107 (90, 127)
At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	460	198 (166, 236)
At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	126	42911 (30641, 60095)
At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	126	41011 (31745, 52980)
At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	126	92863 (74600, 115598)
At-risk	Day 29	Vaccine	Positive	Live virus-nAb MN50	126	233 (179, 303)
At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	126	197 (142, 273)
At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	126	345 (247, 481)
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	14147 (10032, 19949)
At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	120	14796 (10943, 20005)
At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	120	22387 (18015, 27820)
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, 88)
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	380309 (309658, 467078)
At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	460	1138126 (955524, 1355623)
At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	460	2291768 (1963317, 2675167)
At-risk	Day 57	Vaccine	Negative	Live virus-nAb MN50	460	1666 (1386, 2002)
At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	460	1699 (1361, 2122)
At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	460	2822 (2287, 3482)
At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	126	996972 (698286, 1423418)
At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	126	2930696 (2188863, 3923945)
At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	126	5733510 (4581393, 7175359)
At-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	126	3514 (2650, 4659)
At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	126	4717 (3090, 7201)
At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	126	8763 (5969, 12866)
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	198664 (137806, 286399)
At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	120	599785 (434982, 827028)
At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	120	980255 (758629, 1266628)
At-risk	Day 57	Placebo	Positive	Live virus-nAb MN50	120	770 (536, 1107)
At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	120	811 (547, 1203)
At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	120	1695 (1156, 2485)
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	23982 (19654, 29263)
Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	444	24445 (20461, 29205)
Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	444	45607 (39327, 52889)
Not at-risk	Day 29	Vaccine	Negative	Live virus-nAb MN50	444	150 (127, 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	224 (183, 274)
Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	147	37661 (25792, 54990)
Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	147	40204 (28724, 56272)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	147	76599 (58477, 100336)
Not at-risk	Day 29	Vaccine	Positive	Live virus-nAb MN50	147	203 (147, 279)
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	335 (235, 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	11688 (8474, 16119)
Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	150	11162 (8329, 14958)
Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	150	16930 (13432, 21339)
Not at-risk	Day 29	Placebo	Positive	Live virus-nAb MN50	150	84 (65, 109)
Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	150	47 (35, 64)
Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	150	147 (104, 208)
Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	444	410590 (323795, 520651)
Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	444	1051406 (878650, 1258128)
Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	444	2371172 (2036164, 2761300)
Not at-risk	Day 57	Vaccine	Negative	Live virus-nAb MN50	444	1397 (1125, 1733)
Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	444	1816 (1427, 2310)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	444	2929 (2317, 3703)
Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	147	818251 (531355, 1260049)
Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	147	2602083 (1910844, 3543374)
Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	147	5823208 (4625122, 7331644)
Not at-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	147	3939 (2917, 5320)
Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	147	4760 (3065, 7393)
Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	147	7505 (4676, 12045)
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	138210 (92120, 207361)
Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	150	426627 (305619, 595547)
Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	150	659233 (502270, 865248)
Not at-risk	Day 57	Placebo	Positive	Live virus-nAb MN50	150	549 (380, 794)
Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	150	455 (289, 715)
Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	150	1720 (1159, 2554)

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	15573 (12291, 19732)
Age ¡ 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	15353 (12212, 19303)
Age ¡ 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	28809 (23868, 34773)
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	31496 (19820, 50049)
Age ¡ 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	26426 (18770, 37205)
Age ¡ 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	61629 (46183, 82240)
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	154 (99, 241)
Age ¡ 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	73	244 (153, 388)
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	10580 (6916, 16185)
Age ¡ 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10488 (7074, 15550)
Age ¡ 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	75	16856 (12606, 22539)
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, 198)
Age ¡ 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	216	223078 (166792, 298359)
Age ¡ 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	706517 (549446, 908489)
Age ¡ 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1471756 (1181271, 1833674)
Age ¡ 65 At-risk	Day 57	Vaccine	Negative	Live virus-nAb MN50	216	1195 (918, 1556)
Age ¡ 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	216	1048 (765, 1436)
Age ¡ 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	216	1728 (1292, 2312)
Age ¡ 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	73	633405 (390586, 1027180)
Age ¡ 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	1991662 (1337027, 2966819)
Age ¡ 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	4099034 (3012770, 5576953)
Age ¡ 65 At-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	73	2877 (1988, 4162)
Age ¡ 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	73	2857 (1666, 4900)
Age ¡ 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	73	5836 (3497, 9740)
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	133749 (83326, 214685)
Age ¡ 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	75	383038 (253510, 578749)
Age ¡ 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	75	659212 (474785, 915279)
Age ¡ 65 At-risk	Day 57	Placebo	Positive	Live virus-nAb MN50	75	550 (346, 876)
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	1374 (873, 2162)
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	19544 (15538, 24583)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	19500 (15882, 23941)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	36983 (31175, 43874)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Negative	Live virus-nAb MN50	216	135 (111, 163)
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	30233 (19445, 47008)
Age ¡ 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	33109 (22325, 49104)

(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	62078 (45232, 85198)
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	281 (186, 425)
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	9353 (6416, 13636)
Age ¡ 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	74	8455 (5990, 11934)
Age ¡ 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	74	13149 (10011, 17270)
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	128 (85, 192)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	216	334258 (254171, 439580)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	836616 (680060, 1029211)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1924817 (1613922, 2295601)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Negative	Live virus-nAb MN50	216	1212 (945, 1554)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	216	1436 (1089, 1895)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Age ¡ 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	216	2540 (1939, 3325)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	72	636781 (384043, 1055845)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	2168568 (1507995, 3118502)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	4902017 (3734241, 6434980)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	72	3461 (2435, 4918)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	72	3553 (2126, 5936)
Age ¡ 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	72	6090 (3502, 10589)
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	103812 (64361, 167445)
Age ¡ 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	74	324898 (219045, 481905)
Age ¡ 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	74	490719 (355848, 676707)
Age ¡ 65 Not at-risk	Day 57	Placebo	Positive	Live virus-nAb MN50	74	435 (282, 671)
Age ¡ 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	74	329 (193, 560)
Age ¡ 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	74	1447 (910, 2301)
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	49545 (39836, 61621)
Age ¿= 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	244	54849 (45118, 66679)
Age ¿= 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	244	102923 (86487, 122483)
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	79825 (53405, 119318)
Age ¿= 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	53	99071 (69908, 140398)
Age ¿= 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	53	211444 (154527, 289326)
Age ¿= 65 At-risk	Day 29	Vaccine	Positive	Live virus-nAb MN50	53	410 (275, 613)
Age ¿= 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	53	323 (217, 482)
Age ¿= 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	53	692 (483, 992)
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, 11)
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	833523 (633917, 1095981)
Age ¿= 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	244	2294936 (1835361, 2869588)
Age ¿= 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	244	4396225 (3585945, 5389596)
Age ¿= 65 At-risk	Day 57	Vaccine	Negative	Live virus-nAb MN50	244	2713 (2142, 3438)
Age ¿= 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	244	3460 (2575, 4650)
Age ¿= 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	244	5805 (4327, 7790)
Age ¿= 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	53	2477720 (1575376, 3896911)
Age ¿= 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	53	6362749 (4433678, 9131150)
Age ¿= 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	53	11243710 (8578951, 14736185)
Age ¿= 65 At-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	53	5250 (3474, 7933)
Age ¿= 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	53	12900 (6611, 25173)
Age ¿= 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	53	19814 (11709, 33531)
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	81142 (64826, 101565)
Age ¿= 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	93960 (77358, 114124)
Age ¿= 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	158956 (135136, 186975)
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	123517 (80177, 190287)
Age ¿= 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	75	114859 (83777, 157474)
Age ¿= 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	75	238678 (186461, 305518)
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, 815)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Age ¿= 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	75	856 (559, 1312)
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	1398099 (1078520, 1812374)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	4101890 (3391549, 4961009)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	8213421 (7089936, 9514935)
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, 9786)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	228	6853 (5155, 9111)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	75	3174630 (2087124, 4828787)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	75	6970743 (5512037, 8815480)

(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	14775510 (13154081, 16596803)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	75	7935 (5831, 10799)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	75	23161 (14027, 38241)
Age ¿= 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	75	23228 (14231, 37913)
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	24675 (20170, 30188)
Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	511	23270 (19286, 28078)
Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	511	48501 (41686, 56429)
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	208 (168, 256)
Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	149	40523 (26281, 62486)
Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	39866 (27351, 58108)
Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	76435 (56772, 102910)
Female	Day 29	Vaccine	Positive	Live virus-nAb MN50	149	206 (144, 296)
Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	149	176 (117, 264)
Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	149	340 (219, 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	10162 (6967, 14822)
Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	149	11046 (8047, 15164)
Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	149	16347 (12596, 21215)
Female	Day 29	Placebo	Positive	Live virus-nAb MN50	149	85 (63, 115)
Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	149	49 (34, 70)
Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	149	147 (101, 215)
Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	511	400820 (314179, 511355)
Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	511	1145402 (944407, 1389174)
Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	511	2398857 (2045123, 2813774)
Female	Day 57	Vaccine	Negative	Live virus-nAb MN50	511	1406 (1123, 1760)
Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	511	1667 (1313, 2116)
Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	511	2894 (2310, 3625)
Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	149	880697 (553974, 1400115)
Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	2676980 (1849659, 3874348)
Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	5513577 (4222152, 7200008)
Female	Day 57	Vaccine	Positive	Live virus-nAb MN50	149	3595 (2579, 5011)
Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	149	4659 (3056, 7103)
Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	149	8107 (5219, 12593)
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	127886 (80843, 202302)
Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	149	433107 (297108, 631359)
Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	149	735382 (548585, 985783)
Female	Day 57	Placebo	Positive	Live virus-nAb MN50	149	546 (359, 832)
Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	149	537 (320, 900)
Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	149	1609 (1018, 2543)
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	23651 (18727, 29871)
Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	393	26846 (21982, 32786)
Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	393	43637 (36731, 51842)
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	230 (183, 289)
Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	124	37143 (24890, 55427)
Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	124	41050 (28647, 58823)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	124	85380 (63299, 115163)
Male	Day 29	Vaccine	Positive	Live virus-nAb MN50	124	214 (153, 299)
Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	124	170 (120, 241)
Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	124	333 (241, 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	16104 (11768, 22037)
Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	121	13373 (9368, 19089)
Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	121	21013 (16320, 27055)
Male	Day 29	Placebo	Positive	Live virus-nAb MN50	121	92 (71, 119)
Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	121	54 (39, 75)
Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	121	155 (105, 229)
Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	393	403945 (306778, 531888)
Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	393	989572 (809739, 1209345)
Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	393	2287936 (1911349, 2738720)
Male	Day 57	Vaccine	Negative	Live virus-nAb MN50	393	1543 (1209, 1968)
Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	393	1945 (1450, 2608)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	393	2907 (2163, 3906)
Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	124	837070 (508960, 1376704)
Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	124	2687473 (1984480, 3639499)
Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	124	6154788 (4871860, 7775556)
Male	Day 57	Vaccine	Positive	Live virus-nAb MN50	124	4117 (2977, 5694)
Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	124	4857 (2726, 8655)
Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	124	7468 (4045, 13788)
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	191945 (124873, 295044)
Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	121	509328 (355055, 730634)
Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	121	706692 (517642, 964786)
Male	Day 57	Placebo	Positive	Live virus-nAb MN50	121	675 (455, 1001)
Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	121	498 (317, 783)
Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	121	1885 (1264, 2810)

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	18805 (14651, 24138)
Age ¡ 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	245	17080 (13531, 21561)
Age ¡ 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	245	36784 (30495, 44371)
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	81 (63, 102)
Age ¡ 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	245	170 (131, 221)
Age ¡ 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	77	32426 (18936, 55526)
Age ¡ 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	77	31223 (19512, 49964)
Age ¡ 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	77	58267 (40204, 84446)
Age ¡ 65 Female	Day 29	Vaccine	Positive	Live virus-nAb MN50	77	167 (107, 262)
Age ¡ 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	77	142 (86, 236)
Age ¡ 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	77	281 (162, 485)
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	8481 (5442, 13217)
Age ¡ 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	89	8619 (5926, 12535)
Age ¡ 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	89	13365 (9818, 18194)
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 (28, 64)
Age ¡ 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	89	142 (90, 222)
Age ¡ 65 Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	245	305392 (225868, 412914)
Age ¡ 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	245	871117 (685980, 1106221)
Age ¡ 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	245	1848519 (1516807, 2252774)
Age ¡ 65 Female	Day 57	Vaccine	Negative	Live virus-nAb MN50	245	1169 (886, 1544)
Age ¡ 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	245	1218 (908, 1635)
Age ¡ 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	245	2344 (1778, 3091)
Age ¡ 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	77	626692 (351749, 1116543)
Age ¡ 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	77	2096714 (1319664, 3331310)
Age ¡ 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	77	4296627 (3069038, 6015241)
Age ¡ 65 Female	Day 57	Vaccine	Positive	Live virus-nAb MN50	77	2954 (1953, 4469)
Age ¡ 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	77	3157 (1886, 5287)
Age ¡ 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	77	6212 (3603, 10709)
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	101287 (58876, 174249)
Age ¡ 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	89	334614 (214228, 522650)
Age ¡ 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	89	586813 (415547, 828663)
Age ¡ 65 Female	Day 57	Placebo	Positive	Live virus-nAb MN50	89	439 (267, 720)
Age ¡ 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	89	413 (225, 758)
Age ¡ 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	89	1417 (826, 2431)
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, 6)
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	18470 (13815, 24695)
Age ¡ 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	20671 (16126, 26498)
Age ¡ 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	33145 (26769, 41040)
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, 251)
Age ¡ 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	68	28434 (17580, 45989)
Age ¡ 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	68	31959 (20688, 49370)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Age ¡ 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	68	66513 (46326, 95499)
Age ¡ 65 Male	Day 29	Vaccine	Positive	Live virus-nAb MN50	68	183 (123, 272)
Age ¡ 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	68	131 (86, 199)
Age ¡ 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	68	264 (179, 389)
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	11758 (7947, 17397)
Age ¡ 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	60	9178 (5805, 14509)
Age ¡ 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	60	14597 (10534, 20227)
Age ¡ 65 Male	Day 29	Placebo	Positive	Live virus-nAb MN50	60	69 (50, 94)
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	110 (67, 182)
Age ¡ 65 Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	187	310782 (220797, 437440)
Age ¡ 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	734157 (572734, 941076)
Age ¡ 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	1788737 (1432560, 2233471)
Age ¡ 65 Male	Day 57	Vaccine	Negative	Live virus-nAb MN50	187	1261 (931, 1708)
Age ¡ 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	187	1531 (1064, 2203)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Age ¡ 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	187	2351 (1629, 3394)
Age ¡ 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	68	646934 (353933, 1182493)
Age ¡ 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	68	2168221 (1503263, 3127319)
Age ¡ 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	68	5253653 (3964058, 6962780)
Age ¡ 65 Male	Day 57	Vaccine	Positive	Live virus-nAb MN50	68	3812 (2592, 5607)
Age ¡ 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	68	3682 (1837, 7380)
Age ¡ 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	68	5840 (2775, 12288)
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	123721 (71099, 215288)
Age ¡ 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	60	337499 (211581, 538355)
Age ¡ 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	60	425662 (283055, 640116)
Age ¡ 65 Male	Day 57	Placebo	Positive	Live virus-nAb MN50	60	486 (294, 804)
Age ¡ 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	60	283 (159, 504)
Age ¡ 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	60	1458 (885, 2399)
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	67487 (54656, 83329)
Age ¿= 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	266	73151 (60529, 88405)
Age ¿= 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	266	135051 (115339, 158132)
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	93762 (63053, 139429)
Age ¿= 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	99994 (73999, 135122)
Age ¿= 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	212260 (167267, 269355)
Age ¿= 65 Female	Day 29	Vaccine	Positive	Live virus-nAb MN50	72	454 (323, 639)
Age ¿= 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	72	387 (259, 577)
Age ¿= 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	72	704 (481, 1030)
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, 11)
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	1097274 (851584, 1413848)
Age ¿= 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	266	3156766 (2580313, 3862000)
Age ¿= 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	266	6297614 (5350848, 7411898)
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 (4804, 8301)
Age ¿= 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	72	3169036 (2144423, 4683211)
Age ¿= 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	6713448 (5202553, 8663129)
Age ¿= 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	14093295 (12598095, 15765954)
Age ¿= 65 Female	Day 57	Vaccine	Positive	Live virus-nAb MN50	72	7521 (5707, 9910)
Age ¿= 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	72	20148 (11972, 33907)
Age ¿= 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	72	22089 (14149, 34485)
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	57987 (45655, 73648)
Age ¿= 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	206	69276 (56159, 85458)
Age ¿= 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	206	118317 (98129, 142658)
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	115818 (71017, 188880)
Age ¿= 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	119141 (80977, 175292)
Age ¿= 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	247139 (179079, 341065)
Age ¿= 65 Male	Day 29	Vaccine	Positive	Live virus-nAb MN50	56	423 (270, 662)
Age ¿= 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	56	516 (333, 799)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Age ¿= 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	56	899 (572, 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	1045477 (782982, 1395974)
Age ¿= 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	206	2922278 (2336145, 3655469)
Age ¿= 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	206	5586775 (4531616, 6887621)
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	4630 (3361, 6377)
Age ¿= 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	206	6275 (4603, 8555)
Age ¿= 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	56	2506469 (1521534, 4128984)
Age ¿= 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	6702157 (4808091, 9342358)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Age ¿= 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	12073936 (9223667, 15804987)
Age ¿= 65 Male	Day 57	Vaccine	Positive	Live virus-nAb MN50	56	5714 (3618, 9024)
Age ¿= 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	56	15785 (7993, 31174)
Age ¿= 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	56	21269 (11638, 38869)
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	17300 (10454, 28630)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	112	21079 (13535, 32828)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	112	41454 (27925, 61537)
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, 122)
Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	112	159 (105, 241)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	38	42228 (22471, 79357)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	38	50892 (30166, 85856)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	38	85084 (58117, 124565)
Hispanic or Latino	Day 29	Vaccine	Positive	Live virus-nAb MN50	38	281 (151, 524)
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	328439 (166727, 646999)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	112	862213 (552408, 1345763)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	112	2101292 (1544642, 2858545)
Hispanic or Latino	Day 57	Vaccine	Negative	Live virus-nAb MN50	112	1167 (732, 1862)
Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	112	1893 (1142, 3138)
Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	112	1726 (1067, 2792)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	38	1195899 (552115, 2590357)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	38	4778590 (2571795, 8878980)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	38	7316965 (4930528, 10858466)
Hispanic or Latino	Day 57	Vaccine	Positive	Live virus-nAb MN50	38	2840 (1447, 5575)
Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	38	6497 (2827, 14932)
Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	38	7944 (3075, 20525)
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	24177 (20485, 28533)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	723	25435 (21965, 29454)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	723	46892 (41468, 53025)
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, 254)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	208	41958 (29839, 59000)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	208	39610 (29152, 53820)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	208	81834 (63759, 105035)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Live virus-nAb MN50	208	195 (148, 257)
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	337 (240, 473)
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	12616 (9255, 17197)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	198	12153 (9187, 16078)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	198	18891 (15084, 23659)
Not Hispanic or Latino	Day 29	Placebo	Positive	Live virus-nAb MN50	198	94 (72, 122)
Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	198	52 (38, 69)
Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	198	148 (105, 210)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	723	394932 (324377, 480834)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	723	1095375 (939605, 1276970)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	723	2286047 (2004495, 2607145)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Live virus-nAb MN50	723	1517 (1264, 1820)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	723	1811 (1469, 2233)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	723	3149 (2585, 3836)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	208	852459 (581610, 1249440)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	208	2596583 (1969141, 3423951)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	208	5437290 (4395135, 6726555)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Live virus-nAb MN50	208	4027 (3047, 5323)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	208	4552 (3211, 6453)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	208	7701 (5217, 11368)
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	179380 (122975, 261655)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	198	495267 (355781, 689438)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	198	705202 (543308, 915337)
Not Hispanic or Latino	Day 57	Placebo	Positive	Live virus-nAb MN50	198	676 (475, 960)
Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	198	590 (389, 894)
Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	198	2116 (1483, 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	34658 (19186, 62605)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	69	22176 (11878, 41401)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	69	45320 (27868, 73702)
Not reported and unknown	Day 29	Vaccine	Negative	Live virus-nAb MN50	69	158 (94, 265)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	69	134 (73, 246)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	69	338 (183, 623)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	27	20686 (6988, 61228)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	27	35351 (13700, 91220)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	27	66488 (32772, 134894)
Not reported and unknown	Day 29	Vaccine	Positive	Live virus-nAb MN50	27	251 (91, 691)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	27	114 (44, 291)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	27	325 (171, 618)
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	7772 (4079, 14808)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	27	8558 (4244, 17258)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	27	10833 (6651, 17645)
Not reported and unknown	Day 29	Placebo	Positive	Live virus-nAb MN50	27	75 (50, 112)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	27	43 (22, 84)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	27	175 (112, 273)
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	69	597128 (295020, 1208602)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	69	1092114 (647550, 1841889)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	69	3502950 (2226723, 5510633)
Not reported and unknown	Day 57	Vaccine	Negative	Live virus-nAb MN50	69	1275 (666, 2440)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	69	1432 (816, 2511)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	69	2063 (1034, 4116)
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	27	619511 (172443, 2225627)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	27	1692544 (915839, 3127957)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	27	6969464 (3826723, 12693217)
Not reported and unknown	Day 57	Vaccine	Positive	Live virus-nAb MN50	27	3795 (2170, 6636)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	27	4420 (597, 32740)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	27	8420 (1347, 52622)
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	70375 (24874, 199106)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	27	292258 (179012, 477144)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	27	783961 (452126, 1359342)
Not reported and unknown	Day 57	Placebo	Positive	Live virus-nAb MN50	27	245 (127, 475)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	27	176 (48, 641)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	27	461 (203, 1046)

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	26265 (21332, 32338)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	28266 (23127, 34547)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	49851 (42322, 58718)
White Non-Hispanic	Day 29	Vaccine	Negative	Live virus-nAb MN50	389	159 (132, 191)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	389	114 (93, 140)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	389	215 (173, 266)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	112	35869 (23611, 54493)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	112	38777 (25716, 58473)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	76818 (53914, 109452)
White Non-Hispanic	Day 29	Vaccine	Positive	Live virus-nAb MN50	112	172 (123, 241)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	112	162 (109, 241)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	112	300 (192, 467)
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	13290 (8770, 20139)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	112	11123 (7688, 16091)
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	112	19291 (14336, 25958)
White Non-Hispanic	Day 29	Placebo	Positive	Live virus-nAb MN50	112	93 (65, 133)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	112	52 (35, 78)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	112	163 (100, 265)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	389	456661 (352451, 591684)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	1176305 (967228, 1430578)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	2475664 (2085297, 2939107)
White Non-Hispanic	Day 57	Vaccine	Negative	Live virus-nAb MN50	389	1521 (1191, 1943)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	389	1766 (1369, 2279)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	389	3292 (2526, 4290)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	112	837677 (501685, 1398693)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	112	2618440 (1810493, 3786941)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	5117900 (3826248, 6845583)
White Non-Hispanic	Day 57	Vaccine	Positive	Live virus-nAb MN50	112	4697 (3331, 6625)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	112	4043 (2544, 6427)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	112	9026 (5558, 14656)
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	156472 (94794, 258283)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	112	516772 (332400, 803410)
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	112	735886 (529644, 1022438)
White Non-Hispanic	Day 57	Placebo	Positive	Live virus-nAb MN50	112	646 (402, 1039)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	112	549 (308, 976)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	112	2012 (1253, 3231)
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	18990 (12929, 27893)
Black or African American	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	186	21364 (15843, 28809)
Black or African American	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	186	37502 (28190, 49890)
Black or African American	Day 29	Vaccine	Negative	Live virus-nAb MN50	186	127 (94, 170)
Black or African American	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	186	92 (63, 136)
Black or African American	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	186	179 (125, 258)
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	283002 (180902, 442728)
Black or African American	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	186	995774 (693820, 1429141)
Black or African American	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	186	2062946 (1559082, 2729650)
Black or African American	Day 57	Vaccine	Negative	Live virus-nAb MN50	186	1227 (833, 1808)
Black or African American	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	186	1431 (861, 2379)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Black or African American	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	186	2295 (1526, 3452)
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, 9)
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	29058 (15721, 53708)
Asian	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	22450 (13872, 36333)
Asian	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	39381 (27210, 56994)
Asian	Day 29	Vaccine	Negative	Live virus-nAb MN50	72	152 (96, 240)
Asian	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	72	122 (76, 198)
Asian	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	72	256 (166, 395)
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	307565 (168372, 561829)
Asian	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	617613 (396254, 962628)
Asian	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	2147277 (1387913, 3322108)
Asian	Day 57	Vaccine	Negative	Live virus-nAb MN50	72	1291 (832, 2005)
Asian	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	72	3063 (1452, 6462)
Asian	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	72	2894 (1728, 4846)
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	15408 (4857, 48884)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	14839 (5964, 36923)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	44194 (23071, 84657)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Live virus-nAb MN50	23	90 (51, 159)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	23	99 (32, 304)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	23	154 (59, 403)
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	269388 (132372, 548224)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	861285 (401178, 1849081)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	1815698 (747717, 4409102)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Live virus-nAb MN50	23	1811 (811, 4044)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	23	3102 (640, 15045)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	23	2868 (1187, 6929)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	8	2756615 (1542509, 4926340)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	8	2032105 (811229, 5090361)

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

(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	30469 (9953, 93276)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	38260 (24141, 60638)

(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	63341 (31507, 127339)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Live virus-nAb MN50	17	308 (104, 915)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	17	101 (25, 405)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	17	536 (164, 1746)
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	562315 (172087, 1837426)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	1192658 (305252, 4659863)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	3313635 (1463742, 7501441)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Live virus-nAb MN50	17	3353 (981, 11462)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	17	2324 (888, 6084)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	17	6669 (2102, 21157)
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	15030 (7688, 29387)
Multiracial	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	50	16146 (8126, 32079)
Multiracial	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	50	35276 (22869, 54413)
Multiracial	Day 29	Vaccine	Negative	Live virus-nAb MN50	50	150 (77, 290)
Multiracial	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	50	64 (34, 122)
Multiracial	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	50	219 (102, 470)
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	466712 (202077, 1077906)
Multiracial	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	50	818122 (421874, 1586549)
Multiracial	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	50	2097967 (1343390, 3276386)
Multiracial	Day 57	Vaccine	Negative	Live virus-nAb MN50	50	924 (500, 1707)
Multiracial	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	50	1471 (701, 3087)
Multiracial	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	50	1290 (765, 2177)
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	28296 (9834, 81416)
Other	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	26949 (14741, 49270)
Other	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	39026 (17100, 89070)
Other	Day 29	Vaccine	Negative	Live virus-nAb MN50	26	109 (66, 179)
Other	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	26	126 (55, 287)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Other	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	26	142 (73, 275)
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	222896 (56894, 873241)
Other	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	922733 (412448, 2064349)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Other	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	2362094 (1084064, 5146827)
Other	Day 57	Vaccine	Negative	Live virus-nAb MN50	26	965 (329, 2829)
Other	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	26	1949 (729, 5208)
Other	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	26	1463 (403, 5306)
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	24610 (15149, 39981)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	82	22547 (15267, 33299)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	82	51778 (36398, 73657)
Not reported and unknown	Day 29	Vaccine	Negative	Live virus-nAb MN50	82	158 (99, 250)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	82	97 (58, 160)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	82	243 (137, 430)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	29	75957 (23758, 242847)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	44054 (21318, 91038)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	120107 (62445, 231015)
Not reported and unknown	Day 29	Vaccine	Positive	Live virus-nAb MN50	29	298 (101, 878)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	29	252 (84, 758)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	29	604 (185, 1970)
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	10622 (4164, 27094)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	19	13429 (6000, 30056)
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	19	16476 (9120, 29764)
Not reported and unknown	Day 29	Placebo	Positive	Live virus-nAb MN50	19	86 (38, 193)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	19	42 (15, 113)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	19	116 (47, 290)
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	82	387128 (206168, 726921)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	82	1167497 (716317, 1902856)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	82	1960249 (1372043, 2800623)
Not reported and unknown	Day 57	Vaccine	Negative	Live virus-nAb MN50	82	1799 (1041, 3109)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	82	2208 (1195, 4078)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	82	3960 (2197, 7137)
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	29	980068 (328589, 2923205)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	3822630 (2163704, 6753466)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	6278608 (4069304, 9687386)
Not reported and unknown	Day 57	Vaccine	Positive	Live virus-nAb MN50	29	3409 (1667, 6972)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	29	6522 (2727, 15595)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	29	4981 (1359, 18256)
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	305832 (116917, 799995)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	19	429224 (135857, 1356088)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	19	596294 (284192, 1251148)
Not reported and unknown	Day 57	Placebo	Positive	Live virus-nAb MN50	19	568 (274, 1179)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	19	1251 (432, 3620)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	19	1457 (397, 5346)

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	26265 (21332, 32338)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	28266 (23127, 34547)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	49851 (42322, 58718)
White Non-Hispanic	Day 29	Vaccine	Negative	Live virus-nAb MN50	389	159 (132, 191)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	389	114 (93, 140)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	389	215 (173, 266)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	112	35869 (23611, 54493)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	112	38777 (25716, 58473)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	76818 (53914, 109452)
White Non-Hispanic	Day 29	Vaccine	Positive	Live virus-nAb MN50	112	172 (123, 241)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	112	162 (109, 241)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	112	300 (192, 467)
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	13290 (8770, 20139)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	112	11123 (7688, 16091)
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	112	19291 (14336, 25958)
White Non-Hispanic	Day 29	Placebo	Positive	Live virus-nAb MN50	112	93 (65, 133)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	112	52 (35, 78)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	112	163 (100, 265)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	389	456661 (352451, 591684)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	1176305 (967228, 1430578)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	2475664 (2085297, 2939107)
White Non-Hispanic	Day 57	Vaccine	Negative	Live virus-nAb MN50	389	1521 (1191, 1943)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	389	1766 (1369, 2279)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	389	3292 (2526, 4290)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	112	837677 (501685, 1398693)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	112	2618440 (1810493, 3786941)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	5117900 (3826248, 6845583)
White Non-Hispanic	Day 57	Vaccine	Positive	Live virus-nAb MN50	112	4697 (3331, 6625)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	112	4043 (2544, 6427)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	112	9026 (5558, 14656)
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	156472 (94794, 258283)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	112	516772 (332400, 803410)
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	112	735886 (529644, 1022438)
White Non-Hispanic	Day 57	Placebo	Positive	Live virus-nAb MN50	112	646 (402, 1039)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	112	549 (308, 976)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	112	2012 (1253, 3231)
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	20435 (15720, 26563)
Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	401	21316 (17355, 26183)
Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	401	40078 (33406, 48082)
Communities of Color	Day 29	Vaccine	Negative	Live virus-nAb MN50	401	134 (109, 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, 256)
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	317210 (238463, 421960)
Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	401	891811 (709246, 1121369)
Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	401	2144694 (1786247, 2575069)
Communities of Color	Day 57	Vaccine	Negative	Live virus-nAb MN50	401	1295 (1015, 1651)
Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	401	1795 (1297, 2483)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	401	2296 (1766, 2986)
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	20206 (15628, 26125)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	191	21792 (16993, 27947)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	191	37874 (30932, 46375)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Live virus-nAb MN50	191	140 (112, 176)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	191	87 (67, 112)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	191	177 (136, 230)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	56	30267 (18107, 50593)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	32908 (19774, 54765)
Age ¡ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	61692 (39829, 95555)
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, 430)
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	10617 (6447, 17484)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	8086 (5166, 12656)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	14680 (10227, 21072)
Age ¡ 65 White Non-Hispanic	Day 29	Placebo	Positive	Live virus-nAb MN50	61	83 (54, 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 (84, 273)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	191	357009 (259114, 491889)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	191	888626 (697711, 1131782)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	191	1913249 (1547729, 2365094)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Live virus-nAb MN50	191	1290 (953, 1746)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	191	1338 (979, 1829)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	191	2687 (1939, 3724)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	56	642060 (340881, 1209343)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	2177062 (1379785, 3435028)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	4131254 (2882431, 5921133)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Live virus-nAb MN50	56	4572 (3007, 6951)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	56	3195 (1821, 5609)
Age ¡ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	56	8479 (4665, 15413)
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	116557 (63410, 214249)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	61	393861 (229558, 675760)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	61	545084 (365671, 812524)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Positive	Live virus-nAb MN50	61	515 (290, 916)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	61	381 (189, 768)
Age ¡ 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	61	1764 (999, 3115)
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, 6)
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	15225 (10981, 21111)
Age ¡ 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	15073 (11675, 19460)
Age ¡ 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	29395 (23444, 36855)
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, 97)
Age ¡ 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	184	157 (117, 212)
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	225798 (158391, 321891)
Age ¡ 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	635700 (478247, 844990)
Age ¡ 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	1642968 (1309743, 2060971)
Age ¡ 65 Communities of Color	Day 57	Vaccine	Negative	Live virus-nAb MN50	184	1009 (746, 1364)
Age ¡ 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	184	1298 (867, 1944)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	GMT/GMC
Age ¡ 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	184	1750 (1265, 2420)
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)	24220 (20801, 28202)	2422.01 (2080.08, 2820.15)
	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	904	10 (10, 10)	24778 (21610, 28411)	2467.95 (2152.12, 2830.13)
	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	904	10 (10, 10)	46301 (41313, 51891)	4630.07 (4131.28, 5189.07)
	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	904	31 (31, 31)	150 (132, 170)	4.82 (4.24, 5.48)
	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	904	5 (5, 5)	106 (91, 123)	20.92 (18.02, 24.29)
	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	904	5 (5, 5)	217 (186, 253)	42.56 (36.43, 49.72)
	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	273	10 (10, 10)	38929 (28974, 52304)	3892.90 (2897.42, 5230.41)
	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	273	10 (10, 10)	40407 (31177, 52370)	4040.70 (3117.67, 5237.02)
	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	273	10 (10, 10)	80434 (65269, 99124)	8043.43 (6526.87, 9912.39)
	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	273	31 (31, 31)	210 (164, 269)	6.75 (5.28, 8.64)
	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	273	5 (5, 5)	173 (132, 227)	34.11 (25.88, 44.94)
	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	273	5 (5, 5)	337 (255, 445)	67.44 (51.10, 89.00)
	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)	1.00 (0.94, 1.06)
	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	270	10 (10, 10)	12225 (9438, 15835)	1222.47 (943.77, 1583.46)

(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)	11927 (9430, 15085)	1192.71 (943.03, 1508.49)
	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	270	10 (10, 10)	18081 (15037, 21741)	1804.59 (1500.90, 2169.74)
	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	270	31 (31, 31)	88 (71, 108)	2.82 (2.29, 3.48)
	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	270	5 (5, 5)	51 (40, 65)	9.90 (7.76, 12.63)
	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	270	5 (5, 5)	150 (114, 198)	30.06 (22.83, 39.58)
	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	904	10 (10, 10)	402190 (335224, 482533)	40219.00 (33522.42, 48253.31)
	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	904	10 (10, 10)	1074131 (934344, 1234832)	106984.88 (93029.52, 123033.69)
	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	904	10 (10, 10)	2349481 (2085980, 2646267)	234948.11 (208598.05, 264626.72)
	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	904	31 (31, 31)	1465 (1241, 1728)	47.12 (39.94, 55.60)
	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	904	5 (5, 5)	1784 (1481, 2148)	351.91 (292.58, 423.28)
	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	904	5 (5, 5)	2900 (2421, 3473)	568.85 (475.00, 681.25)
	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	273	10 (10, 10)	860317 (615674, 1202171)	86031.74 (61567.44, 120217.11)
	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	273	10 (10, 10)	2681811 (2105403, 3416023)	268181.05 (210540.35, 341602.35)
	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	273	10 (10, 10)	5800314 (4839344, 6952107)	580031.36 (483934.38, 695210.73)
	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	273	31 (31, 31)	3827 (3024, 4843)	123.12 (97.28, 155.82)
	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	273	5 (5, 5)	4749 (3360, 6714)	936.64 (661.16, 1326.88)
	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	273	5 (5, 5)	7806 (5412, 11259)	1561.20 (1082.37, 2251.87)
	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 (0.98, 1.04)
	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)	150527 (109098, 207686)	15052.65 (10909.85, 20768.61)
	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	270	10 (10, 10)	462227 (354280, 603065)	46222.72 (35428.03, 60306.48)
	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	270	10 (10, 10)	723728 (582826, 898695)	72234.22 (58172.10, 89695.62)
	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	270	31 (31, 31)	595 (443, 799)	19.14 (14.25, 25.70)
	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	270	5 (5, 5)	521 (364, 746)	101.40 (71.00, 144.83)
	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	270	5 (5, 5)	1714 (1251, 2350)	342.88 (250.19, 469.90)

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)	18658 (15448, 22535)	1865.78 (1544.78, 2253.48)
Age ¡ 65	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	10 (10, 10)	18570 (15669, 22007)	1847.57 (1558.73, 2189.93)
Age ¡ 65	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	10 (10, 10)	35143 (30513, 40475)	3514.28 (3051.30, 4047.51)
Age ¡ 65	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	432	31 (31, 31)	129 (111, 152)	4.17 (3.56, 4.88)
Age ¡ 65	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	432	5 (5, 5)	82 (68, 98)	16.09 (13.38, 19.36)
Age ¡ 65	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	432	5 (5, 5)	178 (147, 216)	34.87 (28.77, 42.28)
Age ¡ 65	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	145	10 (10, 10)	30497 (21247, 43773)	3049.67 (2124.69, 4377.34)
Age ¡ 65	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	145	10 (10, 10)	31564 (22945, 43423)	3156.45 (2294.46, 4342.26)
Age ¡ 65	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	145	10 (10, 10)	61982 (47941, 80136)	6198.21 (4794.11, 8013.56)
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, 190)	26.90 (19.20, 37.69)
Age ¡ 65	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	145	5 (5, 5)	273 (194, 383)	54.57 (38.86, 76.61)
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 (0.98, 1.05)
Age ¡ 65	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	79	5 (5, 5)	5 (5, 5)	1.00 (0.93, 1.08)
Age ¡ 65	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	149	10 (10, 10)	9585 (7004, 13117)	958.48 (700.40, 1311.67)

(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)	8824 (6622, 11759)	882.41 (662.19, 1175.87)
Age ¡ 65	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)	13814 (11019, 17316)	1381.36 (1101.94, 1731.63)
Age ¡ 65	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	149	31 (31, 31)	76 (59, 98)	2.44 (1.90, 3.14)
Age ¡ 65	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	149	5 (5, 5)	40 (29, 54)	7.73 (5.75, 10.39)
Age ¡ 65	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	149	5 (5, 5)	129 (92, 180)	25.79 (18.44, 36.05)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	432	10 (10, 10)	307742 (245520, 385733)	30774.21 (24552.04, 38573.25)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	10 (10, 10)	808208 (680044, 960528)	80411.05 (67628.81, 95609.20)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	10 (10, 10)	1822080 (1572698, 2111007)	182208.03 (157269.83, 211100.67)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	432	31 (31, 31)	1209 (984, 1484)	38.89 (31.67, 47.74)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	432	5 (5, 5)	1347 (1070, 1694)	265.45 (211.36, 333.39)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	432	5 (5, 5)	2347 (1879, 2933)	459.34 (367.66, 573.88)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	145	10 (10, 10)	636064 (421509, 959832)	63606.42 (42150.88, 95983.21)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	145	10 (10, 10)	2129806 (1580185, 2870596)	212980.59 (158018.49, 287059.64)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	145	10 (10, 10)	4719631 (3771941, 5905425)	471963.07 (377194.10, 590542.48)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	145	31 (31, 31)	3328 (2496, 4437)	107.07 (80.29, 142.77)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	145	5 (5, 5)	3392 (2228, 5165)	666.68 (436.68, 1017.83)
Age ¡ 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	145	5 (5, 5)	6035 (3851, 9458)	1207.02 (770.16, 1891.66)
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, 1.06)
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)	109167 (73580, 161968)	10916.75 (7357.97, 16196.78)
Age ¡ 65	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	149	10 (10, 10)	335691 (242201, 465269)	33569.15 (24220.14, 46526.89)
Age ¡ 65	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)	520333 (398930, 678681)	52033.28 (39893.04, 67868.05)
Age ¡ 65	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	149	31 (31, 31)	456 (318, 653)	14.67 (10.24, 21.01)
Age ¡ 65	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	149	5 (5, 5)	358 (231, 555)	69.69 (45.09, 107.71)
Age ¡ 65	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	149	5 (5, 5)	1432 (977, 2099)	286.38 (195.33, 419.89)
Age ¿= 65	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	472	10 (10, 10)	63096 (53856, 73923)	6309.65 (5385.59, 7392.26)
Age ¿= 65	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	472	10 (10, 10)	71407 (62056, 82168)	7140.71 (6205.56, 8216.77)
Age ¿= 65	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	472	10 (10, 10)	127358 (112877, 143697)	12735.83 (11287.75, 14369.68)
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)	447 (378, 528)	88.40 (74.79, 104.50)
Age ¿= 65	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	128	10 (10, 10)	102819 (75618, 139805)	10281.88 (7561.75, 13980.49)
Age ¿= 65	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	10 (10, 10)	107940 (85062, 136972)	10794.03 (8506.19, 13697.19)
Age ¿= 65	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	10 (10, 10)	226833 (186901, 275296)	22683.27 (18690.07, 27529.64)
Age ¿= 65	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	128	31 (31, 31)	440 (335, 578)	14.16 (10.77, 18.61)
Age ¿= 65	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	128	5 (5, 5)	438 (326, 589)	87.66 (65.27, 117.75)

(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)	783 (585, 1047)	156.61 (117.08, 209.49)
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, 1.03)
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 (0.97, 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)	1074000 (887932, 1299059)	107400.04 (88793.22, 129905.95)
Age ¿= 65	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	472	10 (10, 10)	3050568 (2626433, 3543196)	305056.84 (262643.29, 354319.63)
Age ¿= 65	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	472	10 (10, 10)	5971935 (5245378, 6799131)	597193.54 (524537.78, 679913.13)
Age ¿= 65	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	472	31 (31, 31)	2964 (2499, 3517)	95.38 (80.39, 113.15)
Age ¿= 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	472	5 (5, 5)	5003 (4056, 6170)	990.31 (802.59, 1221.94)
Age ¿= 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	472	5 (5, 5)	6297 (5132, 7727)	1246.76 (1016.97, 1528.47)
Age ¿= 65	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	128	10 (10, 10)	2860668 (2102225, 3892742)	286066.78 (210222.55, 389274.15)

(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)	6708518 (5477341, 8216434)	670851.77 (547734.08, 821643.42)
Age ¿= 65	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	10 (10, 10)	13173416 (11520206, 15063871)	1317341.63 (1152020.62, 1506387.08)
Age ¿= 65	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	128	31 (31, 31)	6671 (5177, 8596)	214.63 (166.57, 276.56)
Age ¿= 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	128	5 (5, 5)	18112 (11950, 27452)	3622.42 (2390.03, 5490.30)
Age ¿= 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	128	5 (5, 5)	21727 (15143, 31174)	4345.45 (3028.59, 6234.88)
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)	24877 (21066, 29377)	2487.65 (2106.58, 2937.67)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	460	10 (10, 10)	25704 (21957, 30089)	2563.60 (2188.82, 3002.56)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	460	10 (10, 10)	48231 (42255, 55054)	4823.14 (4225.45, 5505.36)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	460	31 (31, 31)	148 (129, 170)	4.77 (4.14, 5.49)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	460	5 (5, 5)	107 (90, 127)	21.02 (17.74, 24.91)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	460	5 (5, 5)	198 (166, 236)	39.20 (32.91, 46.71)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	126	10 (10, 10)	42911 (30641, 60095)	4291.13 (3064.13, 6009.47)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	126	10 (10, 10)	41011 (31745, 52980)	4101.05 (3174.54, 5297.98)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	126	10 (10, 10)	92863 (74600, 115598)	9286.30 (7459.95, 11559.77)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	126	31 (31, 31)	233 (179, 303)	7.49 (5.76, 9.75)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	126	5 (5, 5)	197 (142, 273)	38.81 (28.07, 53.65)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	126	5 (5, 5)	345 (247, 481)	68.94 (49.41, 96.19)
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, 1.03)
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, 1.05)
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)	14147 (10032, 19949)	1414.70 (1003.24, 1994.93)

(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)	14796 (10943, 20005)	1479.56 (1094.26, 2000.54)
At-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	120	10 (10, 10)	22387 (18015, 27820)	2238.69 (1801.50, 2781.97)
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, 88)	12.73 (9.43, 17.18)
At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	120	5 (5, 5)	161 (114, 227)	32.15 (22.78, 45.38)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	460	10 (10, 10)	380309 (309658, 467078)	38030.86 (30965.84, 46707.81)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	460	10 (10, 10)	1138126 (955524, 1355623)	113513.45 (95291.37, 135220.05)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	460	10 (10, 10)	2291768 (1963317, 2675167)	229176.83 (196331.73, 267516.71)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	460	31 (31, 31)	1666 (1386, 2002)	53.60 (44.59, 64.42)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	460	5 (5, 5)	1699 (1361, 2122)	333.81 (267.64, 416.33)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	460	5 (5, 5)	2822 (2287, 3482)	558.23 (452.47, 688.70)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	126	10 (10, 10)	996972 (698286, 1423418)	99697.22 (69828.65, 142341.80)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	126	10 (10, 10)	2930696 (2188863, 3923945)	293069.57 (218886.26, 392394.55)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	126	10 (10, 10)	5733510 (4581393, 7175359)	573351.01 (458139.26, 717535.93)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	126	31 (31, 31)	3514 (2650, 4659)	113.06 (85.26, 149.91)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	126	5 (5, 5)	4717 (3090, 7201)	928.07 (609.86, 1412.32)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	126	5 (5, 5)	8763 (5969, 12866)	1752.68 (1193.79, 2573.22)
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)

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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)	198664 (137806, 286399)	19866.43 (13780.60, 28639.91)
At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	120	10 (10, 10)	599785 (434982, 827028)	59978.51 (43498.18, 82702.81)
At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	120	10 (10, 10)	980255 (758629, 1266628)	98025.51 (75862.87, 126662.76)
At-risk	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	120	31 (31, 31)	770 (536, 1107)	24.79 (17.26, 35.60)
At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	120	5 (5, 5)	811 (547, 1203)	159.70 (107.93, 236.29)
At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	120	5 (5, 5)	1695 (1156, 2485)	338.96 (231.14, 497.07)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	444	10 (10, 10)	23982 (19654, 29263)	2398.20 (1965.37, 2926.35)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	444	10 (10, 10)	24445 (20461, 29205)	2433.52 (2036.64, 2907.73)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	444	10 (10, 10)	45607 (39327, 52889)	4560.70 (3932.72, 5288.95)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	444	31 (31, 31)	150 (127, 178)	4.84 (4.10, 5.72)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	444	5 (5, 5)	106 (87, 129)	20.89 (17.19, 25.38)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	444	5 (5, 5)	224 (183, 274)	43.87 (35.82, 53.74)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	147	10 (10, 10)	37661 (25792, 54990)	3766.08 (2579.24, 5499.03)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)	40204 (28724, 56272)	4020.38 (2872.36, 5627.24)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)	76599 (58477, 100336)	7659.87 (5847.73, 10033.56)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	147	31 (31, 31)	203 (147, 279)	6.52 (4.74, 8.97)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	147	5 (5, 5)	165 (117, 233)	32.64 (22.95, 46.43)

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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)	335 (235, 477)	66.93 (46.98, 95.37)
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, 1.05)
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	77	5 (5, 5)	5 (5, 6)	1.00 (0.93, 1.08)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	150	10 (10, 10)	11688 (8474, 16119)	1168.76 (847.45, 1611.89)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	150	10 (10, 10)	11162 (8329, 14958)	1116.19 (832.92, 1495.80)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	150	10 (10, 10)	16930 (13432, 21339)	1688.80 (1339.99, 2128.42)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	150	31 (31, 31)	84 (65, 109)	2.70 (2.08, 3.50)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	150	5 (5, 5)	47 (35, 64)	9.16 (6.75, 12.42)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	150	5 (5, 5)	147 (104, 208)	29.44 (20.87, 41.53)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	444	10 (10, 10)	410590 (323795, 520651)	41059.01 (32379.53, 52065.06)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	444	10 (10, 10)	1051406 (878650, 1258128)	104668.70 (87427.58, 125309.86)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	444	10 (10, 10)	2371172 (2036164, 2761300)	237117.24 (203616.36, 276129.99)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	444	31 (31, 31)	1397 (1125, 1733)	44.93 (36.21, 55.77)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	444	5 (5, 5)	1816 (1427, 2310)	358.85 (282.55, 455.76)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	444	5 (5, 5)	2929 (2317, 3703)	572.83 (453.12, 724.16)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	147	10 (10, 10)	818251 (531355, 1260049)	81825.05 (53135.53, 126004.94)

(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)	2602083 (1910844, 3543374)	260208.27 (191084.39, 354337.40)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)	5823208 (4625122, 7331644)	582320.80 (462512.23, 733164.43)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	147	31 (31, 31)	3939 (2917, 5320)	126.74 (93.85, 171.16)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	147	5 (5, 5)	4760 (3065, 7393)	939.57 (602.95, 1464.11)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	147	5 (5, 5)	7505 (4676, 12045)	1500.97 (935.18, 2409.06)
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)	1.02 (0.98, 1.07)
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)	138210 (92120, 207361)	13821.00 (9211.96, 20736.10)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	150	10 (10, 10)	426627 (305619, 595547)	42662.70 (30561.92, 59554.69)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	150	10 (10, 10)	659233 (502270, 865248)	65758.25 (50101.92, 86307.02)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	150	31 (31, 31)	549 (380, 794)	17.67 (12.22, 25.56)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	150	5 (5, 5)	455 (289, 715)	88.18 (56.20, 138.34)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	150	5 (5, 5)	1720 (1159, 2554)	344.09 (231.81, 510.76)

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)	15573 (12291, 19732)	1557.29 (1229.05, 1973.20)
Age ¡ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	10 (10, 10)	15353 (12212, 19303)	1528.57 (1214.61, 1923.69)
Age ¡ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	10 (10, 10)	28809 (23868, 34773)	2880.94 (2386.84, 3477.33)
Age ¡ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	216	31 (31, 31)	111 (92, 134)	3.56 (2.94, 4.30)
Age ¡ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	216	5 (5, 5)	66 (52, 85)	13.00 (10.24, 16.50)
Age ¡ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	216	5 (5, 5)	131 (103, 168)	26.15 (20.42, 33.49)
Age ¡ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	73	10 (10, 10)	31496 (19820, 50049)	3149.58 (1982.03, 5004.90)
Age ¡ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)	26426 (18770, 37205)	2642.61 (1876.99, 3720.52)
Age ¡ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)	61629 (46183, 82240)	6162.88 (4618.32, 8223.99)
Age ¡ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	73	31 (31, 31)	176 (125, 247)	5.65 (4.02, 7.93)
Age ¡ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	73	5 (5, 5)	154 (99, 241)	30.08 (19.32, 46.83)
Age ¡ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	73	5 (5, 5)	244 (153, 388)	48.71 (30.58, 77.60)
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)	10580 (6916, 16185)	1058.04 (691.65, 1618.53)
Age ¡ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)	10488 (7074, 15550)	1048.80 (707.39, 1554.98)
Age ¡ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	16856 (12606, 22539)	1685.62 (1260.63, 2253.88)
Age ¡ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	75	31 (31, 31)	90 (65, 123)	2.88 (2.10, 3.96)
Age ¡ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	75	5 (5, 5)	50 (35, 72)	9.94 (6.97, 14.17)
Age ¡ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	75	5 (5, 5)	132 (88, 198)	26.36 (17.52, 39.64)
Age ¡ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	216	10 (10, 10)	223078 (166792, 298359)	22307.81 (16679.20, 29835.87)
Age ¡ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	10 (10, 10)	706517 (549446, 908489)	70340.01 (54691.10, 90466.58)
Age ¡ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	10 (10, 10)	1471756 (1181271, 1833674)	147175.61 (118127.13, 183367.37)
Age ¡ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	216	31 (31, 31)	1195 (918, 1556)	38.46 (29.54, 50.08)
Age ¡ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	216	5 (5, 5)	1048 (765, 1436)	205.26 (150.32, 280.29)
Age ¡ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	216	5 (5, 5)	1728 (1292, 2312)	343.92 (256.83, 460.54)
Age ¡ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	73	10 (10, 10)	633405 (390586, 1027180)	63340.53 (39058.62, 102717.98)

(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)	1991662 (1337027, 2966819)	199166.15 (133702.67, 296681.85)
Age ¡ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)	4099034 (3012770, 5576953)	409903.41 (301277.04, 557695.35)
Age ¡ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	73	31 (31, 31)	2877 (1988, 4162)	92.56 (63.97, 133.91)
Age ¡ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	73	5 (5, 5)	2857 (1666, 4900)	557.60 (327.00, 950.81)
Age ¡ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	73	5 (5, 5)	5836 (3497, 9740)	1167.25 (699.41, 1948.04)
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)	133749 (83326, 214685)	13374.90 (8332.57, 21468.52)
Age ¡ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)	383038 (253510, 578749)	38303.83 (25350.96, 57874.86)
Age ¡ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	659212 (474785, 915279)	65921.20 (47478.47, 91527.88)
Age ¡ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	75	31 (31, 31)	550 (346, 876)	17.71 (11.12, 28.20)
Age ¡ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	75	5 (5, 5)	510 (319, 814)	100.58 (63.14, 160.22)

(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)	1374 (873, 2162)	274.81 (174.66, 432.39)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	216	10 (10, 10)	19544 (15538, 24583)	1954.44 (1553.84, 2458.32)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	10 (10, 10)	19500 (15882, 23941)	1939.75 (1579.67, 2381.92)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	10 (10, 10)	36983 (31175, 43874)	3698.34 (3117.50, 4387.39)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	216	31 (31, 31)	135 (111, 163)	4.34 (3.58, 5.25)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	216	5 (5, 5)	86 (69, 108)	17.00 (13.59, 21.27)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	216	5 (5, 5)	193 (153, 243)	37.55 (29.73, 47.43)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	72	10 (10, 10)	30233 (19445, 47008)	3023.35 (1944.49, 4700.80)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)	33109 (22325, 49104)	3310.95 (2232.46, 4910.45)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	62078 (45232, 85198)	6207.75 (4523.16, 8519.76)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	72	31 (31, 31)	174 (120, 252)	5.60 (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)	26.10 (17.31, 39.37)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	72	5 (5, 5)	281 (186, 425)	56.26 (37.26, 84.94)
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, 1.06)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	40	5 (5, 5)	5 (5, 6)	1.00 (0.91, 1.10)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	74	10 (10, 10)	9353 (6416, 13636)	935.31 (641.56, 1363.55)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	74	10 (10, 10)	8455 (5990, 11934)	845.45 (598.96, 1193.39)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	74	10 (10, 10)	13149 (10011, 17270)	1314.90 (1001.13, 1727.02)
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 (1.73, 3.17)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	74	5 (5, 5)	37 (26, 54)	7.26 (5.08, 10.39)
Age ¡ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	74	5 (5, 5)	128 (85, 192)	25.65 (17.09, 38.48)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	216	10 (10, 10)	334258 (254171, 439580)	33425.84 (25417.12, 43958.03)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	10 (10, 10)	836616 (680060, 1029211)	83223.21 (67610.33, 102441.48)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	10 (10, 10)	1924817 (1613922, 2295601)	192481.68 (161392.17, 229560.08)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	216	31 (31, 31)	1212 (945, 1554)	38.99 (30.41, 50.01)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	216	5 (5, 5)	1436 (1089, 1895)	283.58 (215.40, 373.35)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	216	5 (5, 5)	2540 (1939, 3325)	494.79 (377.87, 647.88)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	72	10 (10, 10)	636781 (384043, 1055845)	63678.12 (38404.34, 105584.47)

(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)	72	10 (10, 10)	2168568 (1507995, 3118502)	216856.78 (150799.52, 311850.22)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	4902017 (3734241, 6434980)	490201.65 (373424.10, 643498.00)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	72	31 (31, 31)	3461 (2435, 4918)	111.35 (78.35, 158.23)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	72	5 (5, 5)	3553 (2126, 5936)	699.50 (416.96, 1173.50)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	72	5 (5, 5)	6090 (3502, 10589)	1217.94 (700.41, 2117.88)
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 (0.98, 1.08)
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, 1.01)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	74	10 (10, 10)	103812 (64361, 167445)	10381.21 (6436.11, 16744.51)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	74	10 (10, 10)	324898 (219045, 481905)	32489.82 (21904.49, 48190.51)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	74	10 (10, 10)	490719 (355848, 676707)	49071.89 (35584.83, 67670.71)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	74	31 (31, 31)	435 (282, 671)	14.00 (9.07, 21.60)
Age ¡ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	74	5 (5, 5)	329 (193, 560)	63.64 (37.42, 108.20)

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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)	1447 (910, 2301)	289.32 (181.91, 460.17)
Age ¿= 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	244	10 (10, 10)	49545 (39836, 61621)	4954.55 (3983.63, 6162.11)
Age ¿= 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	244	10 (10, 10)	54849 (45118, 66679)	5484.91 (4511.78, 6667.93)
Age ¿= 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	244	10 (10, 10)	102923 (86487, 122483)	10292.34 (8648.72, 12248.31)
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)	71.13 (56.27, 89.90)
Age ¿= 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	53	10 (10, 10)	79825 (53405, 119318)	7982.55 (5340.45, 11931.77)
Age ¿= 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	53	10 (10, 10)	99071 (69908, 140398)	9907.06 (6990.82, 14039.82)
Age ¿= 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	53	10 (10, 10)	211444 (154527, 289326)	21144.43 (15452.72, 28932.58)
Age ¿= 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	53	31 (31, 31)	410 (275, 613)	13.20 (8.83, 19.74)
Age ¿= 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	53	5 (5, 5)	323 (217, 482)	64.70 (43.39, 96.48)
Age ¿= 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	53	5 (5, 5)	692 (483, 992)	138.40 (96.51, 198.46)
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, 11)	1.02 (0.98, 1.06)
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 (0.94, 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)	833523 (633917, 1095981)	83352.33 (63391.70, 109598.12)
Age ¿= 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	244	10 (10, 10)	2294936 (1835361, 2869588)	229493.57 (183536.11, 286958.79)
Age ¿= 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	244	10 (10, 10)	4396225 (3585945, 5389596)	439622.46 (358594.45, 538959.56)
Age ¿= 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	244	31 (31, 31)	2713 (2142, 3438)	87.31 (68.90, 110.62)
Age ¿= 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	244	5 (5, 5)	3460 (2575, 4650)	682.55 (507.39, 918.17)
Age ¿= 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	244	5 (5, 5)	5805 (4327, 7790)	1138.22 (850.52, 1523.25)
Age ¿= 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	53	10 (10, 10)	2477720 (1575376, 3896911)	247772.04 (157537.57, 389691.06)

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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)	6362749 (4433678, 9131150)	636274.91 (443367.76, 913115.01)
Age ¿= 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	53	10 (10, 10)	11243710 (8578951, 14736185)	1124371.00 (857895.12, 1473618.54)
Age ¿= 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	53	31 (31, 31)	5250 (3474, 7933)	168.92 (111.79, 255.25)
Age ¿= 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	53	5 (5, 5)	12900 (6611, 25173)	2580.05 (1322.21, 5034.52)
Age ¿= 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	53	5 (5, 5)	19814 (11709, 33531)	3962.81 (2341.71, 6706.16)
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)	0.98 (0.93, 1.02)
Age ¿= 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	39	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Age ¿= 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	45	10 (10, 10)	448178 (258490, 777063)	44817.80 (25849.05, 77706.35)
Age ¿= 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	45	10 (10, 10)	1508221 (920499, 2471195)	150822.14 (92049.88, 247119.49)
Age ¿= 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	45	10 (10, 10)	2216494 (1489129, 3299140)	221649.37 (148912.87, 329914.02)
Age ¿= 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	45	31 (31, 31)	1539 (883, 2683)	49.52 (28.41, 86.32)
Age ¿= 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	45	5 (5, 5)	2108 (1021, 4350)	413.20 (201.28, 848.24)

(continued)

Group	Visit	Arm	Baseline COVID	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ¿= 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	45	5 (5, 5)	2609 (1286, 5293)	521.79 (257.19, 1058.61)
Age ¿= 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	228	10 (10, 10)	81142 (64826, 101565)	8114.24 (6482.62, 10156.52)
Age ¿= 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	10 (10, 10)	93960 (77358, 114124)	9395.96 (7735.83, 11412.36)
Age ¿= 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	10 (10, 10)	158956 (135136, 186975)	15895.61 (13513.57, 18697.54)
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 (7.47, 11.66)
Age ¿= 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	228	5 (5, 5)	359 (286, 449)	71.26 (56.85, 89.33)
Age ¿= 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	228	5 (5, 5)	554 (438, 701)	110.85 (87.69, 140.13)
Age ¿= 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	75	10 (10, 10)	123517 (80177, 190287)	12351.73 (8017.66, 19028.65)
Age ¿= 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)	114859 (83777, 157474)	11485.94 (8377.66, 15747.44)
Age ¿= 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	238678 (186461, 305518)	23867.83 (18646.15, 30551.78)
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 (10.27, 21.59)
Age ¿= 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	75	5 (5, 5)	546 (366, 815)	109.25 (73.18, 163.09)
Age ¿= 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	75	5 (5, 5)	856 (559, 1312)	171.29 (111.82, 262.39)
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)	1398099 (1078520, 1812374)	139809.89 (107851.97, 181237.35)
Age ¿= 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	10 (10, 10)	4101890 (3391549, 4961009)	410189.02 (339154.85, 496100.92)
Age ¿= 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	10 (10, 10)	8213421 (7089936, 9514935)	821342.06 (708993.59, 951493.49)
Age ¿= 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	228	31 (31, 31)	3250 (2538, 4162)	104.57 (81.66, 133.90)
Age ¿= 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	228	5 (5, 5)	7341 (5507, 9786)	1458.61 (1094.30, 1944.21)
Age ¿= 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	228	5 (5, 5)	6853 (5155, 9111)	1370.68 (1031.09, 1822.10)
Age ¿= 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	75	10 (10, 10)	3174630 (2087124, 4828787)	317463.04 (208712.41, 482878.72)

(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)	6970743 (5512037, 8815480)	697074.29 (551203.74, 881548.02)
Age ¿= 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	14775510 (13154081, 16596803)	1477550.96 (1315408.07, 1659680.30)
Age ¿= 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	75	31 (31, 31)	7935 (5831, 10799)	255.31 (187.60, 347.44)
Age ¿= 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	75	5 (5, 5)	23161 (14027, 38241)	4632.16 (2805.46, 7648.27)
Age ¿= 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	75	5 (5, 5)	23228 (14231, 37913)	4645.59 (2846.16, 7582.67)
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)	24675 (20170, 30188)	2467.54 (2016.95, 3018.78)
Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	511	10 (10, 10)	23270 (19286, 28078)	2313.42 (1917.00, 2791.82)
Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	511	10 (10, 10)	48501 (41686, 56429)	4850.08 (4168.64, 5642.91)
Female	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	511	31 (31, 31)	143 (121, 168)	4.59 (3.91, 5.40)
Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	511	5 (5, 5)	105 (86, 127)	20.53 (16.95, 24.88)
Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	511	5 (5, 5)	208 (168, 256)	41.23 (33.39, 50.92)
Female	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	149	10 (10, 10)	40523 (26281, 62486)	4052.35 (2628.05, 6248.55)
Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	10 (10, 10)	39866 (27351, 58108)	3986.58 (2735.06, 5810.77)
Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)	76435 (56772, 102910)	7643.53 (5677.17, 10290.96)
Female	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	149	31 (31, 31)	206 (144, 296)	6.63 (4.63, 9.52)
Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	149	5 (5, 5)	176 (117, 264)	34.39 (22.59, 52.35)
Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	149	5 (5, 5)	340 (219, 529)	68.10 (43.86, 105.74)
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 (0.94, 1.02)
Female	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	149	10 (10, 10)	10162 (6967, 14822)	1016.18 (696.69, 1482.19)

(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)	11046 (8047, 15164)	1104.64 (804.69, 1516.40)
Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)	16347 (12596, 21215)	1629.48 (1255.82, 2114.32)
Female	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	149	31 (31, 31)	85 (63, 115)	2.74 (2.02, 3.71)
Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	149	5 (5, 5)	49 (34, 70)	9.41 (6.66, 13.30)
Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	149	5 (5, 5)	147 (101, 215)	29.45 (20.14, 43.07)
Female	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	511	10 (10, 10)	400820 (314179, 511355)	40082.05 (31417.90, 51135.51)
Female	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	511	10 (10, 10)	1145402 (944407, 1389174)	113871.15 (93807.40, 138226.17)
Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	511	10 (10, 10)	2398857 (2045123, 2813774)	239885.69 (204512.29, 281377.44)
Female	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	511	31 (31, 31)	1406 (1123, 1760)	45.24 (36.14, 56.64)
Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	511	5 (5, 5)	1667 (1313, 2116)	326.58 (258.11, 413.21)
Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	511	5 (5, 5)	2894 (2310, 3625)	574.87 (458.70, 720.45)
Female	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	149	10 (10, 10)	880697 (553974, 1400115)	88069.72 (55397.39, 140011.55)
Female	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	10 (10, 10)	2676980 (1849659, 3874348)	267698.00 (184965.87, 387434.83)
Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)	5513577 (4222152, 7200008)	551357.71 (422215.24, 720000.82)
Female	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	149	31 (31, 31)	3595 (2579, 5011)	115.66 (82.97, 161.21)
Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	149	5 (5, 5)	4659 (3056, 7103)	912.05 (594.31, 1399.67)
Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	149	5 (5, 5)	8107 (5219, 12593)	1621.44 (1043.88, 2518.56)
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, 1.08)
Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	85	5 (5, 5)	5 (5, 5)	0.98 (0.94, 1.02)
Female	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	149	10 (10, 10)	127886 (80843, 202302)	12788.60 (8084.34, 20230.24)
Female	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	149	10 (10, 10)	433107 (297108, 631359)	43310.69 (29710.78, 63135.87)
Female	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)	735382 (548585, 985783)	73303.07 (54688.16, 98254.17)
Female	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	149	31 (31, 31)	546 (359, 832)	17.58 (11.55, 26.77)
Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	149	5 (5, 5)	537 (320, 900)	103.11 (61.70, 172.34)
Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	149	5 (5, 5)	1609 (1018, 2543)	321.78 (203.59, 508.59)
Male	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	393	10 (10, 10)	23651 (18727, 29871)	2365.13 (1872.69, 2987.06)
Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	393	10 (10, 10)	26846 (21982, 32786)	2680.27 (2194.34, 3273.81)
Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	393	10 (10, 10)	43637 (36731, 51842)	4363.70 (3673.07, 5184.18)
Male	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	393	31 (31, 31)	159 (130, 196)	5.13 (4.17, 6.31)
Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	393	5 (5, 5)	108 (85, 136)	21.43 (16.93, 27.14)
Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	393	5 (5, 5)	230 (183, 289)	44.32 (35.16, 55.87)
Male	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	124	10 (10, 10)	37143 (24890, 55427)	3714.29 (2489.01, 5542.75)
Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	124	10 (10, 10)	41050 (28647, 58823)	4104.97 (2864.67, 5882.27)
Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	124	10 (10, 10)	85380 (63299, 115163)	8537.97 (6329.91, 11516.28)
Male	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	124	31 (31, 31)	214 (153, 299)	6.90 (4.94, 9.63)
Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	124	5 (5, 5)	170 (120, 241)	33.78 (23.82, 47.89)

(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 (241, 462)	66.67 (48.15, 92.31)
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)	1.03 (0.92, 1.16)
Male	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	121	10 (10, 10)	16104 (11768, 22037)	1610.40 (1176.81, 2203.75)
Male	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	13373 (9368, 19089)	1337.25 (936.81, 1908.86)
Male	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	21013 (16320, 27055)	2101.28 (1632.00, 2705.50)
Male	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	121	31 (31, 31)	92 (71, 119)	2.96 (2.28, 3.83)
Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	121	5 (5, 5)	54 (39, 75)	10.67 (7.69, 14.81)
Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	121	5 (5, 5)	155 (105, 229)	30.98 (20.94, 45.85)
Male	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	393	10 (10, 10)	403945 (306778, 531888)	40394.47 (30677.76, 53188.80)
Male	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	393	10 (10, 10)	989572 (809739, 1209345)	98797.38 (80841.48, 120741.52)
Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	393	10 (10, 10)	2287936 (1911349, 2738720)	228793.57 (191134.93, 273871.95)
Male	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	393	31 (31, 31)	1543 (1209, 1968)	49.64 (38.91, 63.32)
Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	393	5 (5, 5)	1945 (1450, 2608)	387.12 (288.67, 519.16)
Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	393	5 (5, 5)	2907 (2163, 3906)	561.27 (418.01, 753.63)
Male	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	124	10 (10, 10)	837070 (508960, 1376704)	83707.05 (50895.98, 137670.39)

(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)	2687473 (1984480, 3639499)	268747.34 (198448.02, 363949.89)
Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	124	10 (10, 10)	6154788 (4871860, 7775556)	615478.82 (487185.98, 777555.58)
Male	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	124	31 (31, 31)	4117 (2977, 5694)	132.47 (95.78, 183.21)
Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	124	5 (5, 5)	4857 (2726, 8655)	966.24 (542.62, 1720.58)
Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	124	5 (5, 5)	7468 (4045, 13788)	1493.55 (808.91, 2757.67)
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 (0.93, 1.02)
Male	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	121	10 (10, 10)	191945 (124873, 295044)	19194.50 (12487.26, 29504.38)
Male	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	509328 (355055, 730634)	50932.85 (35505.51, 73063.44)
Male	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	706692 (517642, 964786)	70669.22 (51764.20, 96478.61)
Male	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	121	31 (31, 31)	675 (455, 1001)	21.72 (14.65, 32.20)
Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	121	5 (5, 5)	498 (317, 783)	98.90 (62.99, 155.29)
Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	121	5 (5, 5)	1885 (1264, 2810)	376.94 (252.78, 562.07)

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)	18805 (14651, 24138)	1880.53 (1465.05, 2413.84)
Age ¡ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	245	10 (10, 10)	17080 (13531, 21561)	1695.35 (1342.74, 2140.56)
Age ¡ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	245	10 (10, 10)	36784 (30495, 44371)	3678.43 (3049.50, 4437.06)
Age ¡ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	245	31 (31, 31)	122 (100, 149)	3.93 (3.22, 4.79)
Age ¡ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	245	5 (5, 5)	81 (63, 102)	15.72 (12.41, 19.92)
Age ¡ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	245	5 (5, 5)	170 (131, 221)	33.80 (26.03, 43.89)
Age ¡ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	77	10 (10, 10)	32426 (18936, 55526)	3242.62 (1893.62, 5552.63)
Age ¡ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	77	10 (10, 10)	31223 (19512, 49964)	3122.30 (1951.16, 4996.37)
Age ¡ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	77	10 (10, 10)	58267 (40204, 84446)	5826.71 (4020.38, 8444.61)
Age ¡ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	77	31 (31, 31)	167 (107, 262)	5.38 (3.44, 8.41)
Age ¡ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	77	5 (5, 5)	142 (86, 236)	27.73 (16.47, 46.70)
Age ¡ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	77	5 (5, 5)	281 (162, 485)	56.15 (32.47, 97.10)
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 (0.96, 1.08)
Age ¡ 65 Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	45	5 (5, 5)	5 (5, 5)	0.97 (0.92, 1.03)
Age ¡ 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	89	10 (10, 10)	8481 (5442, 13217)	848.09 (544.19, 1321.71)
Age ¡ 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	89	10 (10, 10)	8619 (5926, 12535)	861.90 (592.62, 1253.52)
Age ¡ 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	89	10 (10, 10)	13365 (9818, 18194)	1336.50 (981.76, 1819.41)
Age ¡ 65 Female	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	89	31 (31, 31)	80 (56, 115)	2.59 (1.81, 3.70)
Age ¡ 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	89	5 (5, 6)	42 (28, 64)	8.05 (5.36, 12.09)
Age ¡ 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	89	5 (5, 5)	142 (90, 222)	28.32 (18.07, 44.37)
Age ¡ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	245	10 (10, 10)	305392 (225868, 412914)	30539.15 (22586.79, 41291.38)
Age ¡ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	245	10 (10, 10)	871117 (685980, 1106221)	86466.05 (68012.40, 109926.68)
Age ¡ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	245	10 (10, 10)	1848519 (1516807, 2252774)	184851.88 (151680.66, 225277.35)
Age ¡ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	245	31 (31, 31)	1169 (886, 1544)	37.62 (28.49, 49.67)
Age ¡ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	245	5 (5, 5)	1218 (908, 1635)	237.90 (178.14, 317.71)
Age ¡ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	245	5 (5, 5)	2344 (1778, 3091)	465.84 (353.11, 614.55)
Age ¡ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	77	10 (10, 10)	626692 (351749, 1116543)	62669.22 (35174.93, 111654.25)

(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)	2096714 (1319664, 3331310)	209671.41 (131966.38, 333131.04)
Age ¡ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	77	10 (10, 10)	4296627 (3069038, 6015241)	429662.71 (306903.82, 601524.10)
Age ¡ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	77	31 (31, 31)	2954 (1953, 4469)	95.06 (62.84, 143.79)
Age ¡ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	77	5 (5, 5)	3157 (1886, 5287)	614.55 (363.85, 1038.00)
Age ¡ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	77	5 (5, 5)	6212 (3603, 10709)	1242.30 (720.57, 2141.80)
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, 1.11)
Age ¡ 65 Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	45	5 (5, 5)	5 (5, 5)	0.97 (0.92, 1.03)
Age ¡ 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	89	10 (10, 10)	101287 (58876, 174249)	10128.69 (5887.57, 17424.91)
Age ¡ 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	89	10 (10, 10)	334614 (214228, 522650)	33461.38 (21422.80, 52265.05)
Age ¡ 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	89	10 (10, 10)	586813 (415547, 828663)	58681.26 (41554.75, 82866.35)
Age ¡ 65 Female	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	89	31 (31, 31)	439 (267, 720)	14.11 (8.60, 23.16)
Age ¡ 65 Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	89	5 (5, 6)	413 (225, 758)	78.91 (43.09, 144.53)

(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)	1417 (826, 2431)	283.35 (165.16, 486.14)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	187	10 (10, 10)	18470 (13815, 24695)	1847.03 (1381.46, 2469.49)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	10 (10, 10)	20671 (16126, 26498)	2062.88 (1608.92, 2644.92)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	10 (10, 10)	33145 (26769, 41040)	3314.51 (2676.89, 4104.02)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	187	31 (31, 31)	139 (108, 180)	4.49 (3.47, 5.80)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	187	5 (5, 5)	83 (62, 111)	16.58 (12.36, 22.24)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	187	5 (5, 5)	189 (142, 251)	36.30 (27.24, 48.38)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	68	10 (10, 10)	28434 (17580, 45989)	2843.41 (1758.03, 4598.88)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	68	10 (10, 10)	31959 (20688, 49370)	3195.89 (2068.79, 4937.04)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	68	10 (10, 10)	66513 (46326, 95499)	6651.35 (4632.57, 9549.88)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	68	31 (31, 31)	183 (123, 272)	5.88 (3.95, 8.76)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	68	5 (5, 5)	131 (86, 199)	25.99 (17.09, 39.50)
Age ¡ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	68	5 (5, 5)	264 (179, 389)	52.81 (35.84, 77.81)
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, 6)	5 (5, 6)	1.04 (0.89, 1.21)
Age ¡ 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	60	10 (10, 10)	11758 (7947, 17397)	1175.84 (794.73, 1739.69)

(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)	9178 (5805, 14509)	917.77 (580.53, 1450.91)
Age ¡ 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)	14597 (10534, 20227)	1459.67 (1053.35, 2022.71)
Age ¡ 65 Male	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	60	31 (31, 31)	69 (50, 94)	2.21 (1.61, 3.04)
Age ¡ 65 Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	60	5 (5, 5)	36 (24, 55)	7.22 (4.77, 10.93)
Age ¡ 65 Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	60	5 (5, 5)	110 (67, 182)	22.05 (13.37, 36.36)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	187	10 (10, 10)	310782 (220797, 437440)	31078.22 (22079.74, 43743.98)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	10 (10, 10)	734157 (572734, 941076)	73264.41 (57153.87, 93916.18)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	10 (10, 10)	1788737 (1432560, 2233471)	178873.74 (143256.04, 223347.07)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	187	31 (31, 31)	1261 (931, 1708)	40.58 (29.96, 54.96)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	187	5 (5, 5)	1531 (1064, 2203)	305.50 (212.34, 439.54)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	187	5 (5, 5)	2351 (1629, 3394)	451.14 (312.78, 650.70)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	68	10 (10, 10)	646934 (353933, 1182493)	64693.43 (35393.35, 118249.33)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	68	10 (10, 10)	2168221 (1503263, 3127319)	216822.12 (150326.29, 312731.92)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	68	10 (10, 10)	5253653 (3964058, 6962780)	525365.28 (396405.83, 696278.04)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	68	31 (31, 31)	3812 (2592, 5607)	122.65 (83.39, 180.40)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	68	5 (5, 5)	3682 (1837, 7380)	731.62 (365.35, 1465.06)
Age ¡ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	68	5 (5, 5)	5840 (2775, 12288)	1167.96 (555.06, 2457.62)
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, 6)	5 (5, 5)	0.97 (0.91, 1.03)
Age ¡ 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	60	10 (10, 10)	123721 (71099, 215288)	12372.07 (7109.93, 21528.78)
Age ¡ 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)	337499 (211581, 538355)	33749.93 (21158.10, 53835.54)
Age ¡ 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)	425662 (283055, 640116)	42566.19 (28305.51, 64011.58)
Age ¡ 65 Male	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	60	31 (31, 31)	486 (294, 804)	15.64 (9.46, 25.86)
Age ¡ 65 Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	60	5 (5, 5)	283 (159, 504)	56.62 (31.80, 100.82)
Age ¡ 65 Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	60	5 (5, 5)	1458 (885, 2399)	291.52 (177.10, 479.85)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	266	10 (10, 10)	67487 (54656, 83329)	6748.67 (5465.63, 8332.91)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	266	10 (10, 10)	73151 (60529, 88405)	7315.10 (6052.90, 8840.50)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	266	10 (10, 10)	135051 (115339, 158132)	13505.15 (11533.95, 15813.23)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	266	31 (31, 31)	254 (207, 311)	8.17 (6.68, 10.00)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	266	5 (5, 5)	278 (223, 346)	55.18 (44.26, 68.80)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	266	5 (5, 5)	434 (347, 543)	86.07 (68.77, 107.73)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	72	10 (10, 10)	93762 (63053, 139429)	9376.25 (6305.31, 13942.86)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)	99994 (73999, 135122)	9999.43 (7399.88, 13512.20)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	212260 (167267, 269355)	21225.95 (16726.68, 26935.48)

(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 (323, 639)	14.61 (10.38, 20.56)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	72	5 (5, 5)	387 (259, 577)	77.31 (51.82, 115.34)
Age ¿= 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	72	5 (5, 5)	704 (481, 1030)	140.73 (96.11, 206.08)
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, 11)	1.02 (0.98, 1.06)
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, 1.07)
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)	1097274 (851584, 1413848)	109727.41 (85158.42, 141384.79)

(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)	3156766 (2580313, 3862000)	315676.57 (258031.34, 386199.98)
Age ¿= 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	266	10 (10, 10)	6297614 (5350848, 7411898)	629761.40 (535084.85, 741189.79)
Age ¿= 65 Female	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	266	31 (31, 31)	2786 (2191, 3543)	89.64 (70.49, 113.99)
Age ¿= 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	266	5 (5, 5)	5321 (4036, 7016)	1055.86 (800.46, 1392.75)
Age ¿= 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	266	5 (5, 5)	6315 (4804, 8301)	1252.60 (953.33, 1645.82)
Age ¿= 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	72	10 (10, 10)	3169036 (2144423, 4683211)	316903.56 (214442.32, 468321.13)
Age ¿= 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)	6713448 (5202553, 8663129)	671344.83 (520255.30, 866312.89)
Age ¿= 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	14093295 (12598095, 15765954)	1409329.54 (1259809.46, 1576595.36)
Age ¿= 65 Female	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	72	31 (31, 31)	7521 (5707, 9910)	241.99 (183.64, 318.87)
Age ¿= 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	72	5 (5, 5)	20148 (11972, 33907)	4029.59 (2394.40, 6781.47)
Age ¿= 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	72	5 (5, 5)	22089 (14149, 34485)	4417.82 (2829.84, 6896.92)
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)	57987 (45655, 73648)	5798.65 (4565.53, 7364.83)
Age ¿= 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	206	10 (10, 10)	69276 (56159, 85458)	6927.63 (5615.87, 8545.79)
Age ¿= 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	206	10 (10, 10)	118317 (98129, 142658)	11831.67 (9812.85, 14265.82)
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)	54.40 (42.75, 69.21)
Age ¿= 65 Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	206	5 (5, 5)	463 (360, 595)	91.42 (71.12, 117.51)
Age ¿= 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	56	10 (10, 10)	115818 (71017, 188880)	11581.77 (7101.75, 18887.95)
Age ¿= 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	10 (10, 10)	119141 (80977, 175292)	11914.08 (8097.66, 17529.19)
Age ¿= 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	10 (10, 10)	247139 (179079, 341065)	24713.89 (17907.93, 34106.47)

(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)	423 (270, 662)	13.60 (8.68, 21.31)
Age ¿= 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	56	5 (5, 5)	516 (333, 799)	103.11 (66.51, 159.85)
Age ¿= 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	56	5 (5, 5)	899 (572, 1413)	179.79 (114.41, 282.53)
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 (0.93, 1.08)
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)	1045477 (782982, 1395974)	104547.69 (78298.17, 139597.39)

(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)	2922278 (2336145, 3655469)	292227.75 (233614.54, 365546.85)
Age ¿= 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	206	10 (10, 10)	5586775 (4531616, 6887621)	558677.50 (453161.61, 688762.11)
Age ¿= 65 Male	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	206	31 (31, 31)	3204 (2519, 4077)	103.10 (81.04, 131.17)
Age ¿= 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	206	5 (5, 5)	4630 (3361, 6377)	913.74 (662.82, 1259.65)
Age ¿= 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	206	5 (5, 5)	6275 (4603, 8555)	1239.46 (911.44, 1685.54)
Age ¿= 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	56	10 (10, 10)	2506469 (1521534, 4128984)	250646.95 (152153.40, 412898.38)
Age ¿= 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	10 (10, 10)	6702157 (4808091, 9342358)	670215.69 (480809.11, 934235.79)
Age ¿= 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	10 (10, 10)	12073936 (9223667, 15804987)	1207393.64 (922366.72, 1580498.69)
Age ¿= 65 Male	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	56	31 (31, 31)	5714 (3618, 9024)	183.84 (116.40, 290.34)
Age ¿= 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	56	5 (5, 5)	15785 (7993, 31174)	3156.95 (1598.53, 6234.71)
Age ¿= 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	56	5 (5, 5)	21269 (11638, 38869)	4253.74 (2327.63, 7773.72)
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 (0.92, 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)	17300 (10454, 28630)	1730.01 (1045.38, 2862.99)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	112	10 (10, 10)	21079 (13535, 32828)	2107.94 (1353.54, 3282.80)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	112	10 (10, 10)	41454 (27925, 61537)	4145.39 (2792.51, 6153.70)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	112	31 (31, 31)	105 (77, 143)	3.38 (2.48, 4.61)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	112	5 (5, 5)	77 (49, 122)	15.38 (9.72, 24.34)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	112	5 (5, 6)	159 (105, 241)	28.95 (18.47, 45.39)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	38	10 (10, 10)	42228 (22471, 79357)	4222.84 (2247.10, 7935.73)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	38	10 (10, 10)	50892 (30166, 85856)	5089.16 (3016.63, 8585.59)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	38	10 (10, 10)	85084 (58117, 124565)	8508.42 (5811.70, 12456.46)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	38	31 (31, 31)	281 (151, 524)	9.04 (4.85, 16.87)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	38	5 (5, 5)	197 (108, 362)	38.20 (20.94, 69.68)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	38	5 (5, 5)	351 (193, 638)	70.10 (38.51, 127.62)
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, 1.05)
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)	328439 (166727, 646999)	32843.92 (16672.71, 64699.94)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	112	10 (10, 10)	862213 (552408, 1345763)	86221.27 (55240.83, 134576.31)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	112	10 (10, 10)	2101292 (1544642, 2858545)	210129.19 (154464.18, 285854.46)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	112	31 (31, 31)	1167 (732, 1862)	37.56 (23.54, 59.92)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	112	5 (5, 5)	1893 (1142, 3138)	378.63 (228.41, 627.66)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	112	5 (5, 6)	1726 (1067, 2792)	313.92 (193.17, 510.18)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	38	10 (10, 10)	1195899 (552115, 2590357)	119589.95 (55211.53, 259035.67)

(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)	4778590 (2571795, 8878980)	477858.96 (257179.52, 887898.02)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	38	10 (10, 10)	7316965 (4930528, 10858466)	731696.48 (493052.83, 1085846.61)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	38	31 (31, 31)	2840 (1447, 5575)	91.39 (46.56, 179.39)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	38	5 (5, 5)	6497 (2827, 14932)	1257.79 (549.76, 2877.69)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	38	5 (5, 5)	7944 (3075, 20525)	1588.78 (614.92, 4104.97)
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)	24177 (20485, 28533)	2417.68 (2048.55, 2853.32)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	723	10 (10, 10)	25435 (21965, 29454)	2531.44 (2185.65, 2931.94)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	723	10 (10, 10)	46892 (41468, 53025)	4689.22 (4146.83, 5302.55)
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, 5.72)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	723	5 (5, 5)	107 (91, 126)	21.06 (17.90, 24.78)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	723	5 (5, 5)	214 (181, 254)	42.27 (35.66, 50.09)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	208	10 (10, 10)	41958 (29839, 59000)	4195.84 (2983.89, 5900.05)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	208	10 (10, 10)	39610 (29152, 53820)	3961.01 (2915.22, 5381.96)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	208	10 (10, 10)	81834 (63759, 105035)	8183.45 (6375.88, 10503.46)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	208	31 (31, 31)	195 (148, 257)	6.27 (4.76, 8.27)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	208	5 (5, 5)	179 (131, 246)	35.42 (25.62, 48.98)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	208	5 (5, 5)	337 (240, 473)	67.34 (47.94, 94.59)
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, 1.05)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	119	5 (5, 5)	5 (5, 6)	1.03 (0.97, 1.10)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	198	10 (10, 10)	12616 (9255, 17197)	1261.59 (925.53, 1719.68)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	198	10 (10, 10)	12153 (9187, 16078)	1215.34 (918.71, 1607.75)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	198	10 (10, 10)	18891 (15084, 23659)	1884.35 (1504.75, 2359.71)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	198	31 (31, 31)	94 (72, 122)	3.01 (2.32, 3.91)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	198	5 (5, 5)	52 (38, 69)	9.96 (7.45, 13.31)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	198	5 (5, 5)	148 (105, 210)	29.69 (20.99, 42.01)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	723	10 (10, 10)	394932 (324377, 480834)	39493.23 (32437.73, 48083.37)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	723	10 (10, 10)	1095375 (939605, 1276970)	109017.26 (93472.01, 127147.81)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	723	10 (10, 10)	2286047 (2004495, 2607145)	228604.67 (200449.53, 260714.48)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	723	31 (31, 31)	1517 (1264, 1820)	48.81 (40.67, 58.57)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	723	5 (5, 5)	1811 (1469, 2233)	356.61 (289.68, 439.01)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	723	5 (5, 5)	3149 (2585, 3836)	621.12 (510.08, 756.33)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	208	10 (10, 10)	852459 (581610, 1249440)	85245.95 (58161.02, 124944.03)

(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)	2596583 (1969141, 3423951)	259658.32 (196914.13, 342395.14)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	208	10 (10, 10)	5437290 (4395135, 6726555)	543729.00 (439513.55, 672655.54)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	208	31 (31, 31)	4027 (3047, 5323)	129.58 (98.03, 171.27)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	208	5 (5, 5)	4552 (3211, 6453)	898.76 (631.42, 1279.29)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	208	5 (5, 5)	7701 (5217, 11368)	1540.19 (1043.35, 2273.63)
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, 1.06)
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)	179380 (122975, 261655)	17937.99 (12297.54, 26165.52)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	198	10 (10, 10)	495267 (355781, 689438)	49526.67 (35578.14, 68943.77)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	198	10 (10, 10)	705202 (543308, 915337)	70342.56 (54195.74, 91300.09)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	198	31 (31, 31)	676 (475, 960)	21.74 (15.30, 30.89)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	198	5 (5, 5)	590 (389, 894)	114.01 (75.35, 172.50)

(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)	2116 (1483, 3019)	423.15 (296.51, 603.87)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	69	10 (10, 10)	34658 (19186, 62605)	3465.77 (1918.63, 6260.49)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	69	10 (10, 10)	22176 (11878, 41401)	2217.59 (1187.81, 4140.15)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	69	10 (10, 10)	45320 (27868, 73702)	4532.03 (2786.80, 7370.18)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	69	31 (31, 31)	158 (94, 265)	5.08 (3.03, 8.51)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	69	5 (5, 5)	134 (73, 246)	26.64 (14.54, 48.81)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	69	5 (5, 5)	338 (183, 623)	67.53 (36.60, 124.61)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	27	10 (10, 10)	20686 (6988, 61228)	2068.56 (698.85, 6122.83)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	27	10 (10, 10)	35351 (13700, 91220)	3535.10 (1369.97, 9122.03)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	27	10 (10, 10)	66488 (32772, 134894)	6648.83 (3277.16, 13489.38)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	27	31 (31, 31)	251 (91, 691)	8.08 (2.94, 22.24)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	27	5 (5, 5)	114 (44, 291)	22.73 (8.88, 58.21)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	27	5 (5, 5)	325 (171, 618)	65.05 (34.21, 123.67)
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)	0.98 (0.94, 1.02)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	16	6 (5, 8)	5 (5, 5)	0.83 (0.64, 1.07)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	27	10 (10, 10)	7772 (4079, 14808)	777.19 (407.90, 1480.83)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	27	10 (10, 10)	8558 (4244, 17258)	855.77 (424.35, 1725.81)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	27	10 (10, 10)	10833 (6651, 17645)	1083.27 (665.07, 1764.46)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	27	31 (31, 31)	75 (50, 112)	2.41 (1.62, 3.59)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	27	5 (5, 5)	43 (22, 84)	8.60 (4.40, 16.83)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	27	5 (5, 5)	175 (112, 273)	35.02 (22.49, 54.53)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	69	10 (10, 10)	597128 (295020, 1208602)	59712.85 (29502.05, 120860.23)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	69	10 (10, 10)	1092114 (647550, 1841889)	109211.45 (64754.95, 184188.86)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	69	10 (10, 10)	3502950 (2226723, 5510633)	350294.96 (222672.34, 551063.31)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	69	31 (31, 31)	1275 (666, 2440)	41.01 (21.42, 78.52)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	69	5 (5, 5)	1432 (816, 2511)	284.49 (162.15, 499.14)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	69	5 (5, 5)	2063 (1034, 4116)	412.69 (206.89, 823.22)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	27	10 (10, 10)	619511 (172443, 2225627)	61951.08 (17244.29, 222562.71)

(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)	1692544 (915839, 3127957)	169254.43 (91583.94, 312795.69)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	27	10 (10, 10)	6969464 (3826723, 12693217)	696946.36 (382672.27, 1269321.72)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	27	31 (31, 31)	3795 (2170, 6636)	122.10 (69.83, 213.50)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	27	5 (5, 5)	4420 (597, 32740)	883.97 (119.33, 6547.99)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	27	5 (5, 5)	8420 (1347, 52622)	1684.08 (269.48, 10524.39)
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)	0.98 (0.94, 1.02)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	16	6 (5, 8)	5 (5, 5)	0.83 (0.64, 1.07)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	27	10 (10, 10)	70375 (24874, 199106)	7037.45 (2487.40, 19910.60)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	27	10 (10, 10)	292258 (179012, 477144)	29225.76 (17901.21, 47714.36)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	27	10 (10, 10)	783961 (452126, 1359342)	78396.06 (45212.63, 135934.18)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	27	31 (31, 31)	245 (127, 475)	7.89 (4.08, 15.29)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	27	5 (5, 5)	176 (48, 641)	35.18 (9.65, 128.19)

(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)	461 (203, 1046)	92.17 (40.59, 209.29)

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)	26265 (21332, 32338)	2626.52 (2133.25, 3233.85)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	10 (10, 10)	28266 (23127, 34547)	2809.24 (2297.85, 3434.43)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	10 (10, 10)	49851 (42322, 58718)	4985.05 (4232.25, 5871.77)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	389	31 (31, 31)	159 (132, 191)	5.11 (4.26, 6.13)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	389	5 (5, 5)	114 (93, 140)	22.43 (18.30, 27.48)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	389	5 (5, 5)	215 (173, 266)	42.78 (34.51, 53.03)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	112	10 (10, 10)	35869 (23611, 54493)	3586.93 (2361.06, 5449.28)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	112	10 (10, 10)	38777 (25716, 58473)	3877.74 (2571.60, 5847.28)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	10 (10, 10)	76818 (53914, 109452)	7681.81 (5391.42, 10945.21)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	112	31 (31, 31)	172 (123, 241)	5.53 (3.95, 7.75)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	112	5 (5, 5)	162 (109, 241)	31.70 (20.95, 47.96)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	112	5 (5, 5)	300 (192, 467)	59.93 (38.49, 93.31)
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, 1.18)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	112	10 (10, 10)	13290 (8770, 20139)	1328.98 (876.99, 2013.91)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	112	10 (10, 10)	11123 (7688, 16091)	1112.25 (768.83, 1609.08)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	112	10 (10, 10)	19291 (14336, 25958)	1921.68 (1428.33, 2585.42)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	112	31 (31, 31)	93 (65, 133)	2.99 (2.09, 4.27)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	112	5 (5, 5)	52 (35, 78)	10.16 (6.91, 14.95)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	112	5 (5, 5)	163 (100, 265)	32.60 (20.06, 52.96)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	389	10 (10, 10)	456661 (352451, 591684)	45666.13 (35245.05, 59168.45)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	10 (10, 10)	1176305 (967228, 1430578)	116907.58 (96047.07, 142298.81)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	10 (10, 10)	2475664 (2085297, 2939107)	247566.38 (208529.74, 293910.65)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	389	31 (31, 31)	1521 (1191, 1943)	48.93 (38.31, 62.50)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	389	5 (5, 5)	1766 (1369, 2279)	348.08 (270.70, 447.59)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	389	5 (5, 5)	3292 (2526, 4290)	655.68 (503.11, 854.52)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	112	10 (10, 10)	837677 (501685, 1398693)	83767.74 (50168.50, 139869.31)

(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)	2618440 (1810493, 3786941)	261844.05 (181049.32, 378694.08)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	10 (10, 10)	5117900 (3826248, 6845583)	511790.01 (382624.84, 684558.33)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	112	31 (31, 31)	4697 (3331, 6625)	151.14 (107.17, 213.15)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	112	5 (5, 5)	4043 (2544, 6427)	791.86 (494.31, 1268.53)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	112	5 (5, 5)	9026 (5558, 14656)	1805.14 (1111.64, 2931.28)
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)	1.03 (0.95, 1.11)
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)	156472 (94794, 258283)	15647.21 (9479.35, 25828.27)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	112	10 (10, 10)	516772 (332400, 803410)	51677.18 (33239.96, 80340.97)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	112	10 (10, 10)	735886 (529644, 1022438)	73304.66 (52763.90, 101841.85)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	112	31 (31, 31)	646 (402, 1039)	20.79 (12.93, 33.44)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	112	5 (5, 5)	549 (308, 976)	106.36 (59.78, 189.24)

(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)	2012 (1253, 3231)	402.31 (250.50, 646.10)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	186	10 (10, 10)	18990 (12929, 27893)	1899.03 (1292.90, 2789.31)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	186	10 (10, 10)	21364 (15843, 28809)	2136.40 (1584.27, 2880.95)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	186	10 (10, 10)	37502 (28190, 49890)	3750.22 (2819.01, 4989.03)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	186	31 (31, 31)	127 (94, 170)	4.07 (3.03, 5.47)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	186	5 (5, 5)	92 (63, 136)	18.42 (12.51, 27.11)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	186	5 (5, 5)	179 (125, 258)	34.25 (23.74, 49.43)
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)	283002 (180902, 442728)	28300.21 (18090.15, 44272.82)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	186	10 (10, 10)	995774 (693820, 1429141)	99577.44 (69382.00, 142914.11)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	186	10 (10, 10)	2062946 (1559082, 2729650)	206294.64 (155908.18, 272965.00)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	186	31 (31, 31)	1227 (833, 1808)	39.48 (26.79, 58.18)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	186	5 (5, 5)	1431 (861, 2379)	285.73 (171.88, 475.01)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	186	5 (5, 5)	2295 (1526, 3452)	438.74 (290.52, 662.56)
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)	29058 (15721, 53708)	2905.76 (1572.08, 5370.85)
Asian	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	10 (10, 10)	22450 (13872, 36333)	2245.03 (1387.21, 3633.33)
Asian	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	10 (10, 10)	39381 (27210, 56994)	3938.06 (2721.03, 5699.44)
Asian	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	72	31 (31, 31)	152 (96, 240)	4.89 (3.09, 7.72)
Asian	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	72	5 (5, 6)	122 (76, 198)	22.96 (14.66, 35.97)
Asian	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	72	5 (5, 5)	256 (166, 395)	51.29 (33.28, 79.05)
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, 9)	5 (5, 5)	0.82 (0.56, 1.21)
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)	307565 (168372, 561829)	30756.53 (16837.23, 56182.86)
Asian	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	10 (10, 10)	617613 (396254, 962628)	61761.25 (39625.40, 96262.81)
Asian	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	10 (10, 10)	2147277 (1387913, 3322108)	214727.67 (138791.31, 332210.80)
Asian	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	72	31 (31, 31)	1291 (832, 2005)	41.55 (26.76, 64.51)
Asian	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	72	5 (5, 6)	3063 (1452, 6462)	574.38 (270.39, 1220.14)
Asian	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	72	5 (5, 5)	2894 (1728, 4846)	578.71 (345.54, 969.24)
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, 9)	5 (5, 5)	0.82 (0.56, 1.21)
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)	15408 (4857, 48884)	1540.81 (485.66, 4888.41)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	10 (10, 10)	14839 (5964, 36923)	1483.91 (596.36, 3692.35)

(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)	44194 (23071, 84657)	4419.38 (2307.05, 8465.73)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	23	31 (31, 31)	90 (51, 159)	2.88 (1.62, 5.12)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	23	5 (5, 5)	99 (32, 304)	19.74 (6.41, 60.82)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	23	5 (5, 5)	154 (59, 403)	30.41 (11.69, 79.09)
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)	269388 (132372, 548224)	26938.75 (13237.22, 54822.40)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	10 (10, 10)	861285 (401178, 1849081)	86128.46 (40117.84, 184908.06)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	10 (10, 10)	1815698 (747717, 4409102)	181569.78 (74771.65, 440910.24)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	23	31 (31, 31)	1811 (811, 4044)	58.27 (26.10, 130.11)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	23	5 (5, 5)	3102 (640, 15045)	620.39 (127.92, 3008.91)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	23	5 (5, 5)	2868 (1187, 6929)	565.75 (234.61, 1364.28)
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)	30469 (9953, 93276)	3046.94 (995.30, 9327.65)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	10 (10, 10)	38260 (24141, 60638)	3826.03 (2414.09, 6063.79)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	10 (10, 10)	63341 (31507, 127339)	6334.10 (3150.71, 12733.91)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	17	31 (31, 31)	308 (104, 915)	9.91 (3.34, 29.44)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	17	5 (5, 6)	101 (25, 405)	19.57 (4.95, 77.39)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	17	6 (4, 7)	536 (164, 1746)	94.67 (34.62, 258.90)
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)	562315 (172087, 1837426)	56231.46 (17208.74, 183742.58)

(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)	1192658 (305252, 4659863)	119265.80 (30525.21, 465986.27)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	10 (10, 10)	3313635 (1463742, 7501441)	331363.48 (146374.22, 750144.08)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	17	31 (31, 31)	3353 (981, 11462)	107.87 (31.55, 368.80)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	17	5 (5, 6)	2324 (888, 6084)	448.20 (174.42, 1151.73)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	17	6 (4, 7)	6669 (2102, 21157)	1178.59 (428.76, 3239.70)
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)	15030 (7688, 29387)	1503.05 (768.77, 2938.65)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	50	10 (10, 10)	16146 (8126, 32079)	1614.57 (812.62, 3207.93)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	50	10 (10, 10)	35276 (22869, 54413)	3527.57 (2286.91, 5441.28)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	50	31 (31, 31)	150 (77, 290)	4.82 (2.49, 9.34)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	50	5 (5, 5)	64 (34, 122)	12.78 (6.72, 24.31)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	50	5 (5, 6)	219 (102, 470)	41.60 (19.21, 90.11)
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)	466712 (202077, 1077906)	46671.18 (20207.70, 107790.58)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	50	10 (10, 10)	818122 (421874, 1586549)	81812.24 (42187.44, 158654.86)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	50	10 (10, 10)	2097967 (1343390, 3276386)	209796.69 (134339.01, 327638.63)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	50	31 (31, 31)	924 (500, 1707)	29.73 (16.09, 54.94)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	50	5 (5, 5)	1471 (701, 3087)	294.21 (140.18, 617.48)

(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)	1290 (765, 2177)	245.23 (149.94, 401.07)
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)	28296 (9834, 81416)	2829.56 (983.40, 8141.61)

(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)	26949 (14741, 49270)	2694.95 (1474.07, 4927.00)
Other	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	10 (10, 10)	39026 (17100, 89070)	3902.64 (1709.95, 8907.04)
Other	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	26	31 (31, 31)	109 (66, 179)	3.50 (2.12, 5.77)
Other	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	26	5 (5, 5)	126 (55, 287)	25.22 (11.08, 57.39)
Other	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	26	6 (4, 8)	142 (73, 275)	24.27 (10.12, 58.24)
Other	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	12	10 (10, 10)	41080 (14172, 119079)	4107.99 (1417.18, 11907.85)
Other	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	10 (10, 10)	39608 (19506, 80427)	3960.81 (1950.59, 8042.67)
Other	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	10 (10, 10)	102304 (42388, 246909)	10230.38 (4238.84, 24690.89)
Other	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	12	31 (31, 31)	241 (87, 666)	7.74 (2.80, 21.42)
Other	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	12	5 (5, 6)	297 (119, 741)	57.18 (22.91, 142.73)
Other	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	12	5 (5, 5)	278 (87, 886)	55.61 (17.44, 177.28)
Other	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	2	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	2	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	2	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Live virus-nAb MN50	2	31 (31, 31)	31 (31, 31)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	2	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	2	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	12	10 (10, 10)	6988 (2755, 17724)	698.79 (275.51, 1772.38)
Other	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	12	10 (10, 10)	7530 (5472, 10361)	752.97 (547.23, 1036.06)
Other	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	12	10 (10, 10)	18056 (11387, 28630)	1805.60 (1138.75, 2862.95)

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Group	Visit	Arm	Baseline COVID	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Other	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	12	31 (31, 31)	39 (32, 48)	1.26 (1.02, 1.55)
Other	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	12	5 (5, 5)	28 (14, 60)	5.70 (2.72, 11.95)
Other	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	12	5 (5, 5)	84 (57, 123)	16.77 (11.43, 24.62)
Other	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	26	10 (10, 10)	222896 (56894, 873241)	22289.56 (5689.43, 87324.09)
Other	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	10 (10, 10)	922733 (412448, 2064349)	92273.30 (41244.77, 206434.94)
Other	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	10 (10, 10)	2362094 (1084064, 5146827)	236209.40 (108406.36, 514682.70)
Other	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	26	31 (31, 31)	965 (329, 2829)	31.05 (10.59, 91.02)
Other	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	26	5 (5, 5)	1949 (729, 5208)	389.82 (145.88, 1041.65)
Other	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	26	6 (4, 8)	1463 (403, 5306)	249.78 (66.93, 932.19)
Other	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	12	10 (10, 10)	1419149 (662337, 3040723)	141914.92 (66233.73, 304072.32)
Other	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	10 (10, 10)	2943125 (745091, 11625406)	294312.53 (74509.11, 1162540.61)
Other	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	10 (10, 10)	13044151 (8052613, 21129769)	1304415.07 (805261.35, 2112976.95)
Other	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	12	31 (31, 31)	1760 (593, 5226)	56.63 (19.07, 168.16)
Other	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	12	5 (5, 6)	5827 (822, 41320)	1121.19 (157.64, 7974.24)
Other	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	12	5 (5, 5)	7156 (1634, 31335)	1431.11 (326.80, 6267.07)
Other	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	2	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	2	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	2	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Negative	Live virus-nAb MN50	2	31 (31, 31)	31 (31, 31)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	2	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)

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Group	Visit	Arm	Baseline COVID	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Other	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	2	5 (5, 5)	5 (5, 5)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	12	10 (10, 10)	59690 (18433, 193287)	5968.98 (1843.30, 19328.69)
Other	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	12	10 (10, 10)	207584 (111282, 387222)	20758.37 (11128.23, 38722.24)
Other	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	12	10 (10, 10)	340502 (260014, 445904)	34050.18 (26001.43, 44590.44)
Other	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	12	31 (31, 31)	194 (70, 540)	6.25 (2.25, 17.36)
Other	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	12	5 (5, 5)	603 (308, 1178)	120.55 (61.68, 235.61)
Other	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	12	5 (5, 5)	1085 (314, 3755)	217.08 (62.75, 751.03)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	82	10 (10, 10)	24610 (15149, 39981)	2461.03 (1514.89, 3998.07)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	82	10 (10, 10)	22547 (15267, 33299)	2239.01 (1513.53, 3312.24)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	82	10 (10, 10)	51778 (36398, 73657)	5177.78 (3639.77, 7365.68)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	82	31 (31, 31)	158 (99, 250)	5.08 (3.20, 8.06)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	82	5 (5, 5)	97 (58, 160)	19.22 (11.60, 31.84)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	82	5 (5, 5)	243 (137, 430)	47.04 (26.03, 85.00)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	29	10 (10, 10)	75957 (23758, 242847)	7595.70 (2375.76, 24284.71)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	10 (10, 10)	44054 (21318, 91038)	4405.38 (2131.78, 9103.81)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	10 (10, 10)	120107 (62445, 231015)	12010.74 (6244.51, 23101.54)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	29	31 (31, 31)	298 (101, 878)	9.60 (3.26, 28.24)

(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)	252 (84, 758)	50.48 (16.81, 151.62)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	29	5 (5, 5)	604 (185, 1970)	120.71 (36.98, 394.03)
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, 1.09)
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)	10622 (4164, 27094)	1062.22 (416.45, 2709.37)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	19	10 (10, 10)	13429 (6000, 30056)	1342.93 (600.03, 3005.63)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	19	10 (10, 10)	16476 (9120, 29764)	1647.59 (912.04, 2976.37)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	19	31 (31, 31)	86 (38, 193)	2.77 (1.23, 6.22)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	19	5 (5, 5)	42 (15, 113)	8.32 (3.07, 22.56)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	19	5 (5, 5)	116 (47, 290)	23.30 (9.37, 57.93)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	82	10 (10, 10)	387128 (206168, 726921)	38712.79 (20616.82, 72692.14)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	82	10 (10, 10)	1167497 (716317, 1902856)	115936.58 (71110.61, 189019.50)

(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)	1960249 (1372043, 2800623)	196024.89 (137204.33, 280062.29)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	82	31 (31, 31)	1799 (1041, 3109)	57.88 (33.48, 100.04)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	82	5 (5, 5)	2208 (1195, 4078)	438.93 (237.88, 809.88)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	82	5 (5, 5)	3960 (2197, 7137)	767.52 (424.91, 1386.38)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	29	10 (10, 10)	980068 (328589, 2923205)	98006.81 (32858.92, 292320.51)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	10 (10, 10)	3822630 (2163704, 6753466)	382262.99 (216370.38, 675346.57)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	10 (10, 10)	6278608 (4069304, 9687386)	627860.84 (406930.44, 968738.64)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	29	31 (31, 31)	3409 (1667, 6972)	109.69 (53.64, 224.33)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	29	5 (5, 5)	6522 (2727, 15595)	1304.33 (545.46, 3118.99)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	29	5 (5, 5)	4981 (1359, 18256)	996.22 (271.82, 3651.18)
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)

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Group	Visit	Arm	Baseline COVID	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	19	10 (10, 10)	305832 (116917, 799995)	30583.21 (11691.73, 79999.49)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	19	10 (10, 10)	429224 (135857, 1356088)	42922.45 (13585.67, 135608.79)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	19	10 (10, 10)	596294 (284192, 1251148)	59629.40 (28419.23, 125114.79)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	19	31 (31, 31)	568 (274, 1179)	18.28 (8.81, 37.92)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	19	5 (5, 5)	1251 (432, 3620)	250.21 (86.47, 723.99)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	19	5 (5, 5)	1457 (397, 5346)	291.50 (79.47, 1069.20)

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)	26265 (21332, 32338)	2626.52 (2133.25, 3233.85)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	10 (10, 10)	28266 (23127, 34547)	2809.24 (2297.85, 3434.43)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	10 (10, 10)	49851 (42322, 58718)	4985.05 (4232.25, 5871.77)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	389	31 (31, 31)	159 (132, 191)	5.11 (4.26, 6.13)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	389	5 (5, 5)	114 (93, 140)	22.43 (18.30, 27.48)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	389	5 (5, 5)	215 (173, 266)	42.78 (34.51, 53.03)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	112	10 (10, 10)	35869 (23611, 54493)	3586.93 (2361.06, 5449.28)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	112	10 (10, 10)	38777 (25716, 58473)	3877.74 (2571.60, 5847.28)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	10 (10, 10)	76818 (53914, 109452)	7681.81 (5391.42, 10945.21)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	112	31 (31, 31)	172 (123, 241)	5.53 (3.95, 7.75)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	112	5 (5, 5)	162 (109, 241)	31.70 (20.95, 47.96)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	112	5 (5, 5)	300 (192, 467)	59.93 (38.49, 93.31)
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, 1.18)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	112	10 (10, 10)	13290 (8770, 20139)	1328.98 (876.99, 2013.91)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	112	10 (10, 10)	11123 (7688, 16091)	1112.25 (768.83, 1609.08)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	112	10 (10, 10)	19291 (14336, 25958)	1921.68 (1428.33, 2585.42)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	112	31 (31, 31)	93 (65, 133)	2.99 (2.09, 4.27)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	112	5 (5, 5)	52 (35, 78)	10.16 (6.91, 14.95)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	112	5 (5, 5)	163 (100, 265)	32.60 (20.06, 52.96)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	389	10 (10, 10)	456661 (352451, 591684)	45666.13 (35245.05, 59168.45)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	389	10 (10, 10)	1176305 (967228, 1430578)	116907.58 (96047.07, 142298.81)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	389	10 (10, 10)	2475664 (2085297, 2939107)	247566.38 (208529.74, 293910.65)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	389	31 (31, 31)	1521 (1191, 1943)	48.93 (38.31, 62.50)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	389	5 (5, 5)	1766 (1369, 2279)	348.08 (270.70, 447.59)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	389	5 (5, 5)	3292 (2526, 4290)	655.68 (503.11, 854.52)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	112	10 (10, 10)	837677 (501685, 1398693)	83767.74 (50168.50, 139869.31)

(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)	2618440 (1810493, 3786941)	261844.05 (181049.32, 378694.08)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	112	10 (10, 10)	5117900 (3826248, 6845583)	511790.01 (382624.84, 684558.33)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	112	31 (31, 31)	4697 (3331, 6625)	151.14 (107.17, 213.15)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	112	5 (5, 5)	4043 (2544, 6427)	791.86 (494.31, 1268.53)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	112	5 (5, 5)	9026 (5558, 14656)	1805.14 (1111.64, 2931.28)
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)	1.03 (0.95, 1.11)
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)	156472 (94794, 258283)	15647.21 (9479.35, 25828.27)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	112	10 (10, 10)	516772 (332400, 803410)	51677.18 (33239.96, 80340.97)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	112	10 (10, 10)	735886 (529644, 1022438)	73304.66 (52763.90, 101841.85)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	112	31 (31, 31)	646 (402, 1039)	20.79 (12.93, 33.44)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	112	5 (5, 5)	549 (308, 976)	106.36 (59.78, 189.24)

(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)	2012 (1253, 3231)	402.31 (250.50, 646.10)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	401	10 (10, 10)	20435 (15720, 26563)	2043.48 (1572.03, 2656.33)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	401	10 (10, 10)	21316 (17355, 26183)	2131.64 (1735.47, 2618.26)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	401	10 (10, 10)	40078 (33406, 48082)	4007.80 (3340.63, 4808.22)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	401	31 (31, 31)	134 (109, 163)	4.30 (3.52, 5.25)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	401	5 (5, 5)	94 (73, 120)	18.48 (14.42, 23.69)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	401	5 (5, 5)	201 (158, 256)	38.55 (30.27, 49.10)
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)	0.97 (0.92, 1.03)
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)	317210 (238463, 421960)	31720.96 (23846.31, 42196.01)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	401	10 (10, 10)	891811 (709246, 1121369)	89181.12 (70924.64, 112136.95)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	401	10 (10, 10)	2144694 (1786247, 2575069)	214469.36 (178624.73, 257506.94)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	401	31 (31, 31)	1295 (1015, 1651)	41.66 (32.66, 53.12)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	401	5 (5, 5)	1795 (1297, 2483)	353.83 (255.85, 489.32)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	401	5 (5, 5)	2296 (1766, 2986)	439.70 (338.08, 571.88)
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)	0.97 (0.92, 1.03)
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)	20206 (15628, 26125)	2020.60 (1562.79, 2612.53)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	191	10 (10, 10)	21792 (16993, 27947)	2162.24 (1685.47, 2773.86)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	191	10 (10, 10)	37874 (30932, 46375)	3787.42 (3093.16, 4637.50)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	191	31 (31, 31)	140 (112, 176)	4.52 (3.62, 5.65)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	191	5 (5, 5)	87 (67, 112)	17.06 (13.29, 21.90)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	191	5 (5, 5)	177 (136, 230)	35.24 (27.06, 45.89)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	56	10 (10, 10)	30267 (18107, 50593)	3026.68 (1810.67, 5059.33)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	56	10 (10, 10)	32908 (19774, 54765)	3290.75 (1977.37, 5476.50)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	10 (10, 10)	61692 (39829, 95555)	6169.16 (3982.91, 9555.45)
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 (3.12, 7.13)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	56	5 (5, 5)	138 (85, 224)	26.85 (16.13, 44.71)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	56	5 (5, 5)	249 (144, 430)	49.77 (28.82, 85.96)
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, 1.11)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	36	5 (5, 5)	5 (5, 6)	1.08 (0.93, 1.24)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	61	10 (10, 10)	10617 (6447, 17484)	1061.70 (644.71, 1748.38)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)	8086 (5166, 12656)	808.62 (516.63, 1265.64)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)	14680 (10227, 21072)	1467.99 (1022.70, 2107.18)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	61	31 (31, 31)	83 (54, 127)	2.66 (1.72, 4.09)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	61	5 (5, 6)	42 (26, 67)	8.07 (5.08, 12.83)
Age ¡ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	61	5 (5, 5)	151 (84, 273)	30.30 (16.80, 54.63)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	191	10 (10, 10)	357009 (259114, 491889)	35700.90 (25911.43, 49188.89)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	191	10 (10, 10)	888626 (697711, 1131782)	88169.28 (69150.29, 112419.22)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	191	10 (10, 10)	1913249 (1547729, 2365094)	191324.94 (154772.86, 236509.37)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	191	31 (31, 31)	1290 (953, 1746)	41.50 (30.66, 56.18)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	191	5 (5, 5)	1338 (979, 1829)	263.42 (193.54, 358.52)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	191	5 (5, 5)	2687 (1939, 3724)	536.43 (387.01, 743.54)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	56	10 (10, 10)	642060 (340881, 1209343)	64206.05 (34088.06, 120934.33)

(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)	2177062 (1379785, 3435028)	217706.21 (137978.48, 343502.79)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	56	10 (10, 10)	4131254 (2882431, 5921133)	413125.39 (288243.13, 592113.28)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Live virus-nAb MN50	56	31 (31, 31)	4572 (3007, 6951)	147.09 (96.74, 223.65)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	56	5 (5, 5)	3195 (1821, 5609)	622.41 (351.02, 1103.63)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	56	5 (5, 5)	8479 (4665, 15413)	1695.87 (932.96, 3082.63)
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)	1.04 (0.94, 1.14)
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)	116557 (63410, 214249)	11655.70 (6341.01, 21424.89)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)	393861 (229558, 675760)	39386.07 (22955.83, 67575.99)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)	545084 (365671, 812524)	54508.41 (36567.12, 81252.42)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Live virus-nAb MN50	61	31 (31, 31)	515 (290, 916)	16.57 (9.32, 29.48)
Age ¡ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	61	5 (5, 6)	381 (189, 768)	73.51 (36.44, 148.31)

(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)	1764 (999, 3115)	352.87 (199.88, 622.98)
Age ¡ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	184	10 (10, 10)	15225 (10981, 21111)	1522.55 (1098.06, 2111.14)
Age ¡ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	10 (10, 10)	15073 (11675, 19460)	1507.27 (1167.47, 1945.98)
Age ¡ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	10 (10, 10)	29395 (23444, 36855)	2939.47 (2344.44, 3685.54)
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 (2.71, 4.44)
Age ¡ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	184	5 (5, 5)	71 (52, 97)	13.96 (10.26, 19.01)
Age ¡ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	184	5 (5, 5)	157 (117, 212)	29.84 (22.10, 40.30)
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, 6)	5 (5, 5)	0.97 (0.90, 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)	225798 (158391, 321891)	22579.76 (15839.09, 32189.06)
Age ¡ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	10 (10, 10)	635700 (478247, 844990)	63570.00 (47824.74, 84499.05)
Age ¡ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	10 (10, 10)	1642968 (1309743, 2060971)	164296.78 (130974.35, 206097.09)
Age ¡ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Live virus-nAb MN50	184	31 (31, 31)	1009 (746, 1364)	32.45 (23.99, 43.89)
Age ¡ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	184	5 (5, 5)	1298 (867, 1944)	255.45 (170.64, 382.41)
Age ¡ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	184	5 (5, 5)	1750 (1265, 2420)	332.16 (240.00, 459.71)
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, 6)	5 (5, 5)	0.97 (0.90, 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, 1.03)
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)	63096 (53856, 73923)	18658 (15448, 22535)	3.38 (2.64, 4.33)
Age ¿= 65 vs Age ¡ 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	71407 (62056, 82168)	18570 (15669, 22007)	3.85 (3.08, 4.79)
Age ¿= 65 vs Age ¡ 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	127358 (112877, 143697)	35143 (30513, 40475)	3.62 (3.01, 4.36)
Age ¿= 65 vs Age ¡ 65	Day 29	Vaccine	Negative	Live virus-nAb MN50	256 (220, 298)	129 (111, 152)	1.98 (1.59, 2.46)
Age ¿= 65 vs Age ¡ 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	277 (235, 326)	82 (68, 98)	3.39 (2.65, 4.35)
Age ¿= 65 vs Age ¡ 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	447 (378, 528)	178 (147, 216)	2.51 (1.94, 3.23)
Age ¿= 65 vs Age ¡ 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	102819 (75618, 139805)	30497 (21247, 43773)	3.37 (2.10, 5.42)
Age ¿= 65 vs Age ¡ 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	107940 (85062, 136972)	31564 (22945, 43423)	3.42 (2.30, 5.09)

(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)	226833 (186901, 275296)	61982 (47941, 80136)	3.66 (2.65, 5.05)
Age ¿= 65 vs Age ¡ 65	Day 29	Vaccine	Positive	Live virus-nAb MN50	440 (335, 578)	174 (129, 236)	2.52 (1.68, 3.79)
Age ¿= 65 vs Age ¡ 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	438 (326, 589)	137 (98, 190)	3.20 (2.06, 4.98)
Age ¿= 65 vs Age ¡ 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	783 (585, 1047)	273 (194, 383)	2.87 (1.84, 4.49)
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, 1.03)
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)	1.01 (0.96, 1.06)
Age ¿= 65 vs Age ¡ 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	0.97 (0.91, 1.03)
Age ¿= 65 vs Age ¡ 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	31839 (22967, 44138)	9585 (7004, 13117)	3.32 (2.11, 5.22)
Age ¿= 65 vs Age ¡ 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	39035 (30117, 50594)	8824 (6622, 11759)	4.42 (3.00, 6.51)
Age ¿= 65 vs Age ¡ 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	52144 (43046, 63165)	13814 (11019, 17316)	3.77 (2.81, 5.08)
Age ¿= 65 vs Age ¡ 65	Day 29	Placebo	Positive	Live virus-nAb MN50	156 (119, 205)	76 (59, 98)	2.06 (1.42, 2.98)
Age ¿= 65 vs Age ¡ 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	134 (98, 182)	40 (29, 54)	3.37 (2.18, 5.19)
Age ¿= 65 vs Age ¡ 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	275 (198, 381)	129 (92, 180)	2.13 (1.33, 3.40)

(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)	1074000 (887932, 1299059)	307742 (245520, 385733)	3.49 (2.60, 4.69)
Age ¿= 65 vs Age ¡ 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	3050568 (2626433, 3543196)	808208 (680044, 960528)	3.77 (3.00, 4.74)
Age ¿= 65 vs Age ¡ 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	5971935 (5245378, 6799131)	1822080 (1572698, 2111007)	3.28 (2.69, 3.99)
Age ¿= 65 vs Age ¡ 65	Day 57	Vaccine	Negative	Live virus-nAb MN50	2964 (2499, 3517)	1209 (984, 1484)	2.45 (1.88, 3.20)
Age ¿= 65 vs Age ¡ 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	5003 (4056, 6170)	1347 (1070, 1694)	3.71 (2.72, 5.07)
Age ¿= 65 vs Age ¡ 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	6297 (5132, 7727)	2347 (1879, 2933)	2.68 (1.98, 3.63)
Age ¿= 65 vs Age ¡ 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	2860668 (2102225, 3892742)	636064 (421509, 959832)	4.50 (2.69, 7.52)
Age ¿= 65 vs Age ¡ 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	6708518 (5477341, 8216434)	2129806 (1580185, 2870596)	3.15 (2.20, 4.52)
Age ¿= 65 vs Age ¡ 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	13173416 (11520206, 15063871)	4719631 (3771941, 5905425)	2.79 (2.15, 3.62)
Age ¿= 65 vs Age ¡ 65	Day 57	Vaccine	Positive	Live virus-nAb MN50	6671 (5177, 8596)	3328 (2496, 4437)	2.00 (1.37, 2.94)
Age ¿= 65 vs Age ¡ 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	18112 (11950, 27452)	3392 (2228, 5165)	5.34 (2.96, 9.64)
Age ¿= 65 vs Age ¡ 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	21727 (15143, 31174)	6035 (3851, 9458)	3.60 (2.02, 6.41)
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 (0.94, 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)	109167 (73580, 161968)	4.88 (2.91, 8.20)
Age ¿= 65 vs Age ¡ 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	1627241 (1242074, 2131847)	335691 (242201, 465269)	4.85 (3.17, 7.40)
Age ¿= 65 vs Age ¡ 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	2650955 (2125167, 3306827)	520333 (398930, 678681)	5.09 (3.61, 7.20)
Age ¿= 65 vs Age ¡ 65	Day 57	Placebo	Positive	Live virus-nAb MN50	1693 (1208, 2373)	456 (318, 653)	3.71 (2.27, 6.08)
Age ¿= 65 vs Age ¡ 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	2270 (1516, 3398)	358 (231, 555)	6.33 (3.49, 11.48)
Age ¿= 65 vs Age ¡ 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	3482 (2359, 5139)	1432 (977, 2099)	2.43 (1.41, 4.20)
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 (0.83, 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)	24177 (20485, 28533)	17300 (10454, 28630)	1.40 (0.82, 2.40)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	25435 (21965, 29454)	21079 (13535, 32828)	1.21 (0.74, 1.96)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	46892 (41468, 53025)	41454 (27925, 61537)	1.13 (0.74, 1.73)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Vaccine	Negative	Live virus-nAb MN50	154 (134, 178)	105 (77, 143)	1.47 (1.03, 2.08)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	107 (91, 126)	77 (49, 122)	1.39 (0.85, 2.29)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	214 (181, 254)	159 (105, 241)	1.35 (0.86, 2.12)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	41958 (29839, 59000)	42228 (22471, 79357)	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)	39610 (29152, 53820)	50892 (30166, 85856)	0.78 (0.42, 1.44)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	81834 (63759, 105035)	85084 (58117, 124565)	0.96 (0.60, 1.55)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Vaccine	Positive	Live virus-nAb MN50	195 (148, 257)	281 (151, 524)	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 (0.46, 1.81)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	337 (240, 473)	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, 1.05)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 6)	5 (5, 5)	1.03 (0.97, 1.10)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	12616 (9255, 17197)	15333 (8092, 29052)	0.82 (0.41, 1.66)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	12153 (9187, 16078)	14454 (8294, 25189)	0.84 (0.45, 1.56)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	18891 (15084, 23659)	22217 (16404, 30091)	0.85 (0.58, 1.25)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Placebo	Positive	Live virus-nAb MN50	94 (72, 122)	69 (49, 96)	1.36 (0.89, 2.08)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	52 (38, 69)	55 (30, 101)	0.94 (0.48, 1.85)
Not Hispanic or Latino vs Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	148 (105, 210)	141 (84, 236)	1.06 (0.57, 1.96)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	394932 (324377, 480834)	328439 (166727, 646999)	1.20 (0.60, 2.43)

(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)	1095375 (939605, 1276970)	862213 (552408, 1345763)	1.27 (0.78, 2.06)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2286047 (2004495, 2607145)	2101292 (1544642, 2858545)	1.09 (0.77, 1.54)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Vaccine	Negative	Live virus-nAb MN50	1517 (1264, 1820)	1167 (732, 1862)	1.30 (0.79, 2.15)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	1811 (1469, 2233)	1893 (1142, 3138)	0.96 (0.55, 1.66)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	3149 (2585, 3836)	1726 (1067, 2792)	1.82 (1.06, 3.12)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	852459 (581610, 1249440)	1195899 (552115, 2590357)	0.71 (0.30, 1.69)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	2596583 (1969141, 3423951)	4778590 (2571795, 8878980)	0.54 (0.28, 1.07)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5437290 (4395135, 6726555)	7316965 (4930528, 10858466)	0.74 (0.47, 1.16)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Vaccine	Positive	Live virus-nAb MN50	4027 (3047, 5323)	2840 (1447, 5575)	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	4552 (3211, 6453)	6497 (2827, 14932)	0.70 (0.28, 1.74)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	7701 (5217, 11368)	7944 (3075, 20525)	0.97 (0.34, 2.73)
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)	179380 (122975, 261655)	104344 (59705, 182357)	1.72 (0.86, 3.43)

(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)	495267 (355781, 689438)	463502 (275148, 780794)	1.07 (0.57, 2.00)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	705202 (543308, 915337)	787311 (464021, 1335841)	0.90 (0.49, 1.62)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Placebo	Positive	Live virus-nAb MN50	676 (475, 960)	620 (316, 1216)	1.09 (0.51, 2.32)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	590 (389, 894)	668 (366, 1221)	0.88 (0.42, 1.87)
Not Hispanic or Latino vs Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	2116 (1483, 3019)	1601 (840, 3053)	1.32 (0.64, 2.73)
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, 1.08)
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)	1.03 (0.98, 1.08)
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)	26265 (21332, 32338)	20435 (15720, 26563)	0.78 (0.56, 1.09)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	28266 (23127, 34547)	21316 (17355, 26183)	0.75 (0.57, 1.01)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	49851 (42322, 58718)	40078 (33406, 48082)	0.80 (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, 191)	134 (109, 163)	0.84 (0.64, 1.10)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	114 (93, 140)	94 (73, 120)	0.82 (0.60, 1.14)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	215 (173, 266)	201 (158, 256)	0.94 (0.68, 1.29)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	35869 (23611, 54493)	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)	38777 (25716, 58473)	41836 (28084, 62323)	1.08 (0.61, 1.91)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	76818 (53914, 109452)	78012 (60301, 100925)	1.02 (0.66, 1.57)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Live virus-nAb MN50	172 (123, 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, 241)	180 (119, 273)	1.11 (0.63, 1.98)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	300 (192, 467)	322 (217, 476)	1.07 (0.59, 1.94)
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 (0.92, 1.04)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 6)	5 (5, 5)	0.94 (0.84, 1.06)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	13290 (8770, 20139)	12123 (8528, 17232)	0.91 (0.53, 1.57)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	11123 (7688, 16091)	13408 (9733, 18472)	1.21 (0.74, 1.97)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	19291 (14336, 25958)	19223 (14987, 24655)	1.00 (0.68, 1.47)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Live virus-nAb MN50	93 (65, 133)	86 (69, 107)	0.92 (0.61, 1.41)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	52 (35, 78)	52 (37, 72)	0.98 (0.59, 1.64)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	163 (100, 265)	136 (101, 185)	0.84 (0.47, 1.48)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	456661 (352451, 591684)	317210 (238463, 421960)	0.69 (0.47, 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)	1176305 (967228, 1430578)	891811 (709246, 1121369)	0.76 (0.56, 1.02)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2475664 (2085297, 2939107)	2144694 (1786247, 2575069)	0.87 (0.67, 1.11)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Live virus-nAb MN50	1521 (1191, 1943)	1295 (1015, 1651)	0.85 (0.60, 1.20)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	1766 (1369, 2279)	1795 (1297, 2483)	1.02 (0.67, 1.53)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	3292 (2526, 4290)	2296 (1766, 2986)	0.70 (0.48, 1.01)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	837677 (501685, 1398693)	937217 (575113, 1527308)	1.12 (0.55, 2.27)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	2618440 (1810493, 3786941)	2656286 (1746143, 4040823)	1.01 (0.58, 1.77)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5117900 (3826248, 6845583)	6156573 (4667493, 8120716)	1.20 (0.81, 1.80)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Live virus-nAb MN50	4697 (3331, 6625)	2799 (1834, 4272)	0.60 (0.35, 1.03)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	4043 (2544, 6427)	5318 (3282, 8614)	1.32 (0.67, 2.57)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	9026 (5558, 14656)	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)	0.96 (0.90, 1.04)
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)	156472 (94794, 258283)	148554 (100902, 218709)	0.95 (0.50, 1.79)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	516772 (332400, 803410)	440850 (322338, 602935)	0.85 (0.50, 1.47)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	735886 (529644, 1022438)	722847 (510073, 1024378)	0.98 (0.61, 1.59)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Live virus-nAb MN50	646 (402, 1039)	642 (415, 992)	0.99 (0.52, 1.89)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	549 (308, 976)	564 (377, 844)	1.03 (0.51, 2.08)

(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	2012 (1253, 3231)	2027 (1377, 2983)	1.01 (0.55, 1.86)
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)	23982 (19654, 29263)	24877 (21066, 29377)	0.96 (0.74, 1.25)
Not at-risk vs At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	24445 (20461, 29205)	25704 (21957, 30089)	0.95 (0.75, 1.21)
Not at-risk vs At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	45607 (39327, 52889)	48231 (42255, 55054)	0.95 (0.77, 1.16)
Not at-risk vs At-risk	Day 29	Vaccine	Negative	Live virus-nAb MN50	150 (127, 178)	148 (129, 170)	1.02 (0.82, 1.27)
Not at-risk vs At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	106 (87, 129)	107 (90, 127)	0.99 (0.76, 1.29)
Not at-risk vs At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	224 (183, 274)	198 (166, 236)	1.13 (0.86, 1.48)

(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)	37661 (25792, 54990)	42911 (30641, 60095)	0.88 (0.53, 1.47)
Not at-risk vs At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	40204 (28724, 56272)	41011 (31745, 52980)	0.98 (0.64, 1.51)
Not at-risk vs At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	76599 (58477, 100336)	92863 (74600, 115598)	0.82 (0.58, 1.18)
Not at-risk vs At-risk	Day 29	Vaccine	Positive	Live virus-nAb MN50	203 (147, 279)	233 (179, 303)	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	335 (235, 477)	345 (247, 481)	0.97 (0.59, 1.59)
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 (0.97, 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 (0.95, 1.04)
Not at-risk vs At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 6)	5 (5, 5)	1.03 (0.97, 1.10)
Not at-risk vs At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	11688 (8474, 16119)	14147 (10032, 19949)	0.83 (0.51, 1.33)
Not at-risk vs At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	11162 (8329, 14958)	14796 (10943, 20005)	0.75 (0.49, 1.16)
Not at-risk vs At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	16930 (13432, 21339)	22387 (18015, 27820)	0.76 (0.55, 1.05)
Not at-risk vs At-risk	Day 29	Placebo	Positive	Live virus-nAb MN50	84 (65, 109)	102 (78, 133)	0.82 (0.57, 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 (35, 64)	65 (48, 88)	0.73 (0.47, 1.13)
Not at-risk vs At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	147 (104, 208)	161 (114, 227)	0.92 (0.56, 1.49)
Not at-risk vs At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	410590 (323795, 520651)	380309 (309658, 467078)	1.08 (0.79, 1.48)
Not at-risk vs At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	1051406 (878650, 1258128)	1138126 (955524, 1355623)	0.92 (0.72, 1.19)
Not at-risk vs At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2371172 (2036164, 2761300)	2291768 (1963317, 2675167)	1.03 (0.83, 1.29)
Not at-risk vs At-risk	Day 57	Vaccine	Negative	Live virus-nAb MN50	1397 (1125, 1733)	1666 (1386, 2002)	0.84 (0.63, 1.12)
Not at-risk vs At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	1816 (1427, 2310)	1699 (1361, 2122)	1.07 (0.77, 1.49)
Not at-risk vs At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	2929 (2317, 3703)	2822 (2287, 3482)	1.04 (0.76, 1.43)
Not at-risk vs At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	818251 (531355, 1260049)	996972 (698286, 1423418)	0.82 (0.47, 1.45)
Not at-risk vs At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	2602083 (1910844, 3543374)	2930696 (2188863, 3923945)	0.89 (0.58, 1.37)
Not at-risk vs At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5823208 (4625122, 7331644)	5733510 (4581393, 7175359)	1.02 (0.73, 1.41)
Not at-risk vs At-risk	Day 57	Vaccine	Positive	Live virus-nAb MN50	3939 (2917, 5320)	3514 (2650, 4659)	1.12 (0.74, 1.70)
Not at-risk vs At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	4760 (3065, 7393)	4717 (3090, 7201)	1.01 (0.54, 1.88)
Not at-risk vs At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	7505 (4676, 12045)	8763 (5969, 12866)	0.86 (0.46, 1.59)
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)	1.02 (0.98, 1.07)
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)	138210 (92120, 207361)	198664 (137806, 286399)	0.70 (0.40, 1.21)
Not at-risk vs At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	426627 (305619, 595547)	599785 (434982, 827028)	0.71 (0.44, 1.14)
Not at-risk vs At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	659233 (502270, 865248)	980255 (758629, 1266628)	0.67 (0.46, 0.99)
Not at-risk vs At-risk	Day 57	Placebo	Positive	Live virus-nAb MN50	549 (380, 794)	770 (536, 1107)	0.71 (0.42, 1.20)
Not at-risk vs At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	455 (289, 715)	811 (547, 1203)	0.56 (0.30, 1.03)
Not at-risk vs At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	1720 (1159, 2554)	1695 (1156, 2485)	1.02 (0.58, 1.76)
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 (0.98, 1.02)
Male vs Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5 (5, 5)	5 (5, 5)	1.00 (0.94, 1.07)
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)	23651 (18727, 29871)	24675 (20170, 30188)	0.96 (0.70, 1.31)
Male vs Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	26846 (21982, 32786)	23270 (19286, 28078)	1.15 (0.87, 1.53)
Male vs Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	43637 (36731, 51842)	48501 (41686, 56429)	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 (0.75, 1.40)
Male vs Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	230 (183, 289)	208 (168, 256)	1.11 (0.81, 1.51)
Male vs Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	37143 (24890, 55427)	40523 (26281, 62486)	0.92 (0.51, 1.66)
Male vs Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	41050 (28647, 58823)	39866 (27351, 58108)	1.03 (0.61, 1.74)
Male vs Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	85380 (63299, 115163)	76435 (56772, 102910)	1.12 (0.73, 1.72)
Male vs Female	Day 29	Vaccine	Positive	Live virus-nAb MN50	214 (153, 299)	206 (144, 296)	1.04 (0.64, 1.70)
Male vs Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	170 (120, 241)	176 (117, 264)	0.97 (0.56, 1.66)
Male vs Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	333 (241, 462)	340 (219, 529)	0.98 (0.57, 1.69)
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)	1.06 (0.95, 1.17)
Male vs Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	16104 (11768, 22037)	10162 (6967, 14822)	1.58 (0.96, 2.60)
Male vs Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	13373 (9368, 19089)	11046 (8047, 15164)	1.21 (0.73, 2.00)
Male vs Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	21013 (16320, 27055)	16347 (12596, 21215)	1.29 (0.87, 1.89)
Male vs Female	Day 29	Placebo	Positive	Live virus-nAb MN50	92 (71, 119)	85 (63, 115)	1.08 (0.72, 1.61)
Male vs Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	54 (39, 75)	49 (34, 70)	1.10 (0.67, 1.80)

(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	155 (105, 229)	147 (101, 215)	1.05 (0.61, 1.81)
Male vs Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	403945 (306778, 531888)	400820 (314179, 511355)	1.01 (0.70, 1.46)
Male vs Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	989572 (809739, 1209345)	1145402 (944407, 1389174)	0.86 (0.65, 1.15)
Male vs Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2287936 (1911349, 2738720)	2398857 (2045123, 2813774)	0.95 (0.75, 1.22)
Male vs Female	Day 57	Vaccine	Negative	Live virus-nAb MN50	1543 (1209, 1968)	1406 (1123, 1760)	1.10 (0.79, 1.53)
Male vs Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	1945 (1450, 2608)	1667 (1313, 2116)	1.17 (0.80, 1.71)
Male vs Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	2907 (2163, 3906)	2894 (2310, 3625)	1.00 (0.69, 1.46)
Male vs Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	837070 (508960, 1376704)	880697 (553974, 1400115)	0.95 (0.48, 1.88)
Male vs Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	2687473 (1984480, 3639499)	2676980 (1849659, 3874348)	1.00 (0.62, 1.63)
Male vs Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	6154788 (4871860, 7775556)	5513577 (4222152, 7200008)	1.12 (0.78, 1.60)
Male vs Female	Day 57	Vaccine	Positive	Live virus-nAb MN50	4117 (2977, 5694)	3595 (2579, 5011)	1.15 (0.71, 1.84)
Male vs Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	4857 (2726, 8655)	4659 (3056, 7103)	1.04 (0.51, 2.14)
Male vs Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	7468 (4045, 13788)	8107 (5219, 12593)	0.92 (0.43, 1.96)
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 (0.92, 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)	191945 (124873, 295044)	127886 (80843, 202302)	1.50 (0.79, 2.85)

(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)	509328 (355055, 730634)	433107 (297108, 631359)	1.18 (0.69, 2.01)
Male vs Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	706692 (517642, 964786)	735382 (548585, 985783)	0.96 (0.61, 1.52)
Male vs Female	Day 57	Placebo	Positive	Live virus-nAb MN50	675 (455, 1001)	546 (359, 832)	1.24 (0.69, 2.22)
Male vs Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	498 (317, 783)	537 (320, 900)	0.93 (0.45, 1.90)
Male vs Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	1885 (1264, 2810)	1609 (1018, 2543)	1.17 (0.63, 2.16)

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	99.7% (98.1%, 100%)	99.7% (98.1%, 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	65.6% (61.1%, 69.7%)	65.6% (61.1%, 69.7%)	50.5% (46%, 55%)
	Day 29	Negative	Pseudovirus-nAb ID50	Vaccine vs Placebo	86.9% (78.9%, 90%)	86.9% (78.9%, 90%)	81.9% (78.1%, 85.2%)
	Day 29	Negative	Pseudovirus-nAb ID80	Vaccine vs Placebo	93.6% (84%, 95.7%)	94.1% (84.6%, 96.2%)	88.6% (78.8%, 91.3%)
	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	24.1% (12.9%, 34.5%)	24.1% (12.9%, 34.5%)	30.1% (18.9%, 40.2%)
	Day 29	Positive	Pseudovirus-nAb ID50	Vaccine vs Placebo	14.2% (6.9%, 22.1%)	14.1% (6.8%, 22%)	22.7% (13.2%, 31.9%)
	Day 29	Positive	Pseudovirus-nAb ID80	Vaccine vs Placebo	5.2% (1.6%, 11%)	5.2% (1.6%, 11%)	7.5% (1.4%, 14.6%)
	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% (84.8%, 90.9%)
	Day 57	Negative	Pseudovirus-nAb ID50	Vaccine vs Placebo	97.4% (88%, 98.9%)	97.4% (88%, 98.9%)	97.8% (96.5%, 98.6%)
	Day 57	Negative	Pseudovirus-nAb ID80	Vaccine vs Placebo	99.8% (99.3%, 99.9%)	99.8% (99.3%, 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%, 19.6%)	12.8% (7.2%, 19.6%)	23.4% (15.8%, 31.7%)
	Day 57	Positive	Pseudovirus-nAb ID50	Vaccine vs Placebo	3% (0.6%, 8.7%)	3% (0.6%, 8.7%)	9.5% (2.3%, 16.8%)
	Day 57	Positive	Pseudovirus-nAb ID80	Vaccine vs Placebo	0.3% (0.1%, 1.3%)	0.3% (0.1%, 1.3%)	3% (1%, 8.5%)

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	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	24220 (20801, 28202)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	2422.01 (2080.08, 2820.15)
Day 29	Anti RBD IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	24778 (21610, 28411)	155	6.5/2373.7 = 0.3% (0.0%, 1.9%)	10 (10, 10)	99.7% (98.1%, 100%)	2471.84 (2155.62, 2834.45)
Day 29	Anti Spike IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	46301 (41313, 51891)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	4630.07 (4131.28, 5189.07)
Day 29	Live virus-nAb MN50	904	8136.9/12410.2 = 65.6% (61.1%, 69.7%)	150 (132, 170)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	31 (31, 31)	65.6% (61.1%, 69.7%)	4.82 (4.24, 5.48)
Day 29	Pseudovirus-nAb ID50	904	11057/12410.2 = 89.1% (85.9%, 91.7%)	106 (91, 123)	155	52.5/2373.7 = 2.2% (0.5%, 9.5%)	5 (5, 5)	86.9% (78.9%, 90%)	20.83 (17.88, 24.28)
Day 29	Pseudovirus-nAb ID80	904	11816.1/12410.2 = 95.2% (92.9%, 96.8%)	217 (186, 253)	155	38.5/2373.7 = 1.6% (0.2%, 11.0%)	5 (5, 5)	93.6% (84%, 95.7%)	42.34 (36.01, 49.78)
Day 57	Anti N IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	402190 (335224, 482533)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	40219.00 (33522.42, 48253.31)
Day 57	Anti RBD IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	1074131 (934344, 1234832)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	107413.11 (93434.37, 123483.22)
Day 57	Anti Spike IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	2349481 (2085980, 2646267)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	234948.11 (208598.05, 264626.72)
Day 57	Live virus-nAb MN50	904	11702.9/12410.2 = 94.3% (91.8%, 96.1%)	1465 (1241, 1728)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	31 (31, 31)	94.3% (91.8%, 96.1%)	47.12 (39.94, 55.60)
Day 57	Pseudovirus-nAb ID50	904	12283.9/12410.2 = 99.0% (97.9%, 99.5%)	1784 (1481, 2148)	155	38.5/2373.7 = 1.6% (0.2%, 11.0%)	5 (5, 5)	97.4% (88%, 98.9%)	351.07 (290.72, 423.93)
Day 57	Pseudovirus-nAb ID80	904	12381.3/12410.2 = 99.8% (99.3%, 99.9%)	2900 (2421, 3473)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	5 (5, 5)	99.8% (99.3%, 99.9%)	579.95 (484.26, 694.55)

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	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	38929 (28974, 52304)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	12225 (9438, 15835)	0% (0%, 0%)	3.18 (2.15, 4.72)
Day 29	Anti RBD IgG (IU/ml)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	40407 (31177, 52370)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	11927 (9430, 15085)	0% (0%, 0%)	3.39 (2.39, 4.81)
Day 29	Anti Spike IgG (IU/ml)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	80434 (65269, 99124)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	18081 (15037, 21741)	0% (0%, 0%)	4.45 (3.37, 5.88)
Day 29	Live virus-nAb MN50	273	1053.2/1416.8 = 74.3% (66.5%, 80.9%)	210 (164, 269)	270	671.6/1337.3 = 50.2% (42.2%, 58.3%)	88 (71, 108)	24.1% (12.9%, 34.5%)	2.39 (1.73, 3.30)
Day 29	Pseudovirus-nAb ID50	273	1364.6/1416.8 = 96.3% (91.9%, 98.4%)	173 (132, 227)	270	1098.3/1337.3 = 82.1% (74.5%, 87.9%)	51 (40, 65)	14.2% (6.9%, 22.1%)	3.40 (2.36, 4.91)
Day 29	Pseudovirus-nAb ID80	273	1397/1416.8 = 98.6% (97.0%, 99.4%)	337 (255, 445)	270	1249.4/1337.3 = 93.4% (87.7%, 96.6%)	150 (114, 198)	5.2% (1.6%, 11%)	2.24 (1.52, 3.32)
Day 57	Anti N IgG (IU/ml)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	860317 (615674, 1202171)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	150527 (109098, 207686)	0% (0%, 0%)	5.72 (3.59, 9.09)
Day 57	Anti RBD IgG (IU/ml)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	2681811 (2105403, 3416023)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	462227 (354280, 603065)	0% (0%, 0%)	5.80 (4.05, 8.31)
Day 57	Anti Spike IgG (IU/ml)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	5800314 (4839344, 6952107)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	723728 (582826, 898695)	0% (0%, 0%)	8.01 (6.04, 10.63)
Day 57	Live virus-nAb MN50	273	1401.8/1416.8 = 98.9% (96.1%, 99.7%)	3827 (3024, 4843)	270	1152.2/1337.3 = 86.2% (79.4%, 91.0%)	595 (443, 799)	12.8% (7.2%, 19.6%)	6.43 (4.41, 9.38)
Day 57	Pseudovirus-nAb ID50	273	1413.9/1416.8 = 99.8% (98.6%, 100.0%)	4749 (3360, 6714)	270	1294.1/1337.3 = 96.8% (91.1%, 98.9%)	521 (364, 746)	3% (0.6%, 8.7%)	9.12 (5.54, 15.00)
Day 57	Pseudovirus-nAb ID80	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	7806 (5412, 11259)	270	1332.9/1337.3 = 99.7% (98.7%, 99.9%)	1714 (1251, 2350)	0.3% (0.1%, 1.3%)	4.55 (2.81, 7.38)

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	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	24220 (20801, 28202)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	38929 (28974, 52304)	0% (0%, 0%)	1.61 (1.15, 2.24)
Day 29	Anti RBD IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	24778 (21610, 28411)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	40407 (31177, 52370)	0% (0%, 0%)	1.63 (1.22, 2.19)
Day 29	Anti Spike IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	46301 (41313, 51891)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	80434 (65269, 99124)	0% (0%, 0%)	1.74 (1.37, 2.20)
Day 29	Live virus-nAb MN50	904	8136.9/12410.2 = 65.6% (61.1%, 69.7%)	150 (132, 170)	273	1053.2/1416.8 = 74.3% (66.5%, 80.9%)	210 (164, 269)	8.8% (-0.1%, 16.7%)	1.40 (1.06, 1.85)
Day 29	Pseudovirus-nAb ID50	904	11057/12410.2 = 89.1% (85.9%, 91.7%)	106 (91, 123)	273	1364.6/1416.8 = 96.3% (91.9%, 98.4%)	173 (132, 227)	7.2% (2.1%, 11%)	1.63 (1.20, 2.22)
Day 29	Pseudovirus-nAb ID80	904	11816.1/12410.2 = 95.2% (92.9%, 96.8%)	217 (186, 253)	273	1397/1416.8 = 98.6% (97.0%, 99.4%)	337 (255, 445)	3.4% (1.1%, 5.8%)	1.55 (1.13, 2.14)
Day 57	Anti N IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	402190 (335224, 482533)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	860317 (615674, 1202171)	0% (0%, 0%)	2.14 (1.46, 3.13)
Day 57	Anti RBD IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	1074131 (934344, 1234832)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	2681811 (2105403, 3416023)	0% (0%, 0%)	2.50 (1.89, 3.30)
Day 57	Anti Spike IgG (IU/ml)	904	12410.2/12410.2 = 100.0% (100.0%, 100.0%)	2349481 (2085980, 2646267)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	5800314 (4839344, 6952107)	0% (0%, 0%)	2.47 (1.99, 3.07)
Day 57	Live virus-nAb MN50	904	11702.9/12410.2 = 94.3% (91.8%, 96.1%)	1465 (1241, 1728)	273	1401.8/1416.8 = 98.9% (96.1%, 99.7%)	3827 (3024, 4843)	4.6% (1.3%, 7.2%)	2.61 (1.96, 3.48)
Day 57	Pseudovirus-nAb ID50	904	12283.9/12410.2 = 99.0% (97.9%, 99.5%)	1784 (1481, 2148)	273	1413.9/1416.8 = 99.8% (98.6%, 100.0%)	4749 (3360, 6714)	0.8% (-0.5%, 1.9%)	2.66 (1.80, 3.94)
Day 57	Pseudovirus-nAb ID80	904	12381.3/12410.2 = 99.8% (99.3%, 99.9%)	2900 (2421, 3473)	273	1416.8/1416.8 = 100.0% (100.0%, 100.0%)	7806 (5412, 11259)	0.2% (0.1%, 0.7%)	2.69 (1.79, 4.05)

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	0/2373.7 = 0.0% (0.0%, 0.0%)	10 (10, 10)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	12225 (9438, 15835)	100% (100%, 100%)	1222.47 (943.77, 1583.46)
Day 29	Anti RBD IgG (IU/ml)	155	6.5/2373.7 = 0.3% (0.0%, 1.9%)	10 (10, 10)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	11927 (9430, 15085)	99.7% (98.1%, 100%)	1189.83 (940.71, 1504.92)
Day 29	Anti Spike IgG (IU/ml)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	10 (10, 10)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	18081 (15037, 21741)	100% (100%, 100%)	1808.06 (1503.67, 2174.05)
Day 29	Live virus-nAb MN50	155	0/2373.7 = 0.0% (0.0%, 0.0%)	31 (31, 31)	270	671.6/1337.3 = 50.2% (42.2%, 58.3%)	88 (71, 108)	50.2% (42.2%, 58.3%)	2.82 (2.29, 3.48)
Day 29	Pseudovirus-nAb ID50	155	52.5/2373.7 = 2.2% (0.5%, 9.5%)	5 (5, 5)	270	1098.3/1337.3 = 82.1% (74.5%, 87.9%)	51 (40, 65)	79.9% (69.4%, 85.9%)	9.99 (7.78, 12.82)
Day 29	Pseudovirus-nAb ID80	155	38.5/2373.7 = 1.6% (0.2%, 11.0%)	5 (5, 5)	270	1249.4/1337.3 = 93.4% (87.7%, 96.6%)	150 (114, 198)	91.8% (80.8%, 95.3%)	29.33 (22.18, 38.78)
Day 57	Anti N IgG (IU/ml)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	10 (10, 10)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	150527 (109098, 207686)	100% (100%, 100%)	15052.65 (10909.85, 20768.61)
Day 57	Anti RBD IgG (IU/ml)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	10 (10, 10)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	462227 (354280, 603065)	100% (100%, 100%)	46222.72 (35428.03, 60306.48)
Day 57	Anti Spike IgG (IU/ml)	155	0/2373.7 = 0.0% (0.0%, 0.0%)	10 (10, 10)	270	1337.3/1337.3 = 100.0% (100.0%, 100.0%)	723728 (582826, 898695)	100% (100%, 100%)	72372.82 (58282.56, 89869.50)
Day 57	Live virus-nAb MN50	155	0/2373.7 = 0.0% (0.0%, 0.0%)	31 (31, 31)	270	1152.2/1337.3 = 86.2% (79.4%, 91.0%)	595 (443, 799)	86.2% (79.4%, 91%)	19.14 (14.25, 25.70)
Day 57	Pseudovirus-nAb ID50	155	38.5/2373.7 = 1.6% (0.2%, 11.0%)	5 (5, 5)	270	1294.1/1337.3 = 96.8% (91.1%, 98.9%)	521 (364, 746)	95.1% (84.2%, 97.7%)	102.55 (71.56, 146.95)
Day 57	Pseudovirus-nAb ID80	155	0/2373.7 = 0.0% (0.0%, 0.0%)	5 (5, 5)	270	1332.9/1337.3 = 99.7% (98.7%, 99.9%)	1714 (1251, 2350)	99.7% (98.7%, 99.9%)	342.88 (250.19, 469.90)

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	73.2/73.2 = 100.0% (100.0%, 100.0%)	13161 (3939, 43978)	894	12337/12337 = 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	73.2/73.2 = 100.0% (100.0%, 100.0%)	93160 (25382, 341924)	894	12337/12337 = 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	73.2/73.2 = 100.0% (100.0%, 100.0%)	13062 (6241, 27336)	894	12337/12337 = 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	73.2/73.2 = 100.0% (100.0%, 100.0%)	335181 (113451, 990270)	894	12337/12337 = 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	73.2/73.2 = 100.0% (100.0%, 100.0%)	18276 (10842, 30809)	894	12337/12337 = 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	73.2/73.2 = 100.0% (100.0%, 100.0%)	429724 (169006, 1092644)	894	12337/12337 = 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	36.9/73.2 = 60.0% (24.6%, 87.3%)	119 (52, 276)	894	8099.9/12337 = 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	62.2/73.2 = 90.0% (42.7%, 99.1%)	1179 (322, 4318)	894	11640.8/12337 = 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	55.1/73.2 = 80.0% (38.2%, 96.3%)	38 (17, 83)	894	11002/12337 = 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	51.2/73.2 = 80.0% (38.2%, 96.3%)	173 (41, 739)	894	12232.8/12337 = 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	73.2/73.2 = 100.0% (100.0%, 100.0%)	241 (112, 520)	894	11742.8/12337 = 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	73.2/73.2 = 100.0% (100.0%, 100.0%)	1278 (261, 6252)	894	12308.1/12337 = 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	1414.9/1414.9 = 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	1414.9/1414.9 = 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	1414.9/1414.9 = 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	1414.9/1414.9 = 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	1414.9/1414.9 = 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	1414.9/1414.9 = 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	1051.3/1414.9 = 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	1399.9/1414.9 = 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	1362.7/1414.9 = 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	1412/1414.9 = 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	1395.1/1414.9 = 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	1414.9/1414.9 = 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	1335.5/1335.5 = 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	1335.5/1335.5 = 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	1335.5/1335.5 = 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	1335.5/1335.5 = 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	1335.5/1335.5 = 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	1335.5/1335.5 = 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	671.6/1335.5 = 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	1152.2/1335.5 = 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	1098.3/1335.5 = 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	1294.1/1335.5 = 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	1249.4/1335.5 = 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	1332.9/1335.5 = 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.