

COVID-19 Immunogenicity Analysis Report
mock Study

USG COVID-19 Response Biostatistics Team

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Chapter 1

Tabular Description of Immunogenicity Data

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

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

(continued)

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

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

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

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

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

Table 3a. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by All participants

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
All participants								
	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	13268.1/13295 = 99.8% (98.6%, 100.0%)	13268.1/13295 = 99.8% (98.6%, 100.0%)
	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)
	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	163	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	163	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	163	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)	1354.5/1357 = 99.8% (98.7%, 100.0%)
	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)
	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)	13295/13295 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)	1432/1432 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	163	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	163	76.3/13359 = 0.6% (0.1%, 4.0%)	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	163	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)	0/13359 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)	1357/1357 = 100.0% (100.0%, 100.0%)

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

Table 3b. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Age

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age								
Age < 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	432	10518/10518 = 100.0% (100.0%, 100.0%)	10491.1/10518 = 99.7% (98.2%, 100.0%)	10491.1/10518 = 99.7% (98.2%, 100.0%)
Age < 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	146	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	80	0/10234 = 0% (0.0%, 0.0%)	0/10234 = 0% (0.0%, 0.0%)	0/10234 = 0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	80	0/10234 = 0% (0.0%, 0.0%)	0/10234 = 0% (0.0%, 0.0%)	0/10234 = 0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	80	0/10234 = 0% (0.0%, 0.0%)	0/10234 = 0% (0.0%, 0.0%)	0/10234 = 0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	147	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)	1095.5/1098 = 99.8% (98.4%, 100.0%)
Age < 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	147	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	147	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	432	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)	10518/10518 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	146	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)	1145/1145 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	80	0/10234 = 0% (0.0%, 0.0%)	0/10234 = 0% (0.0%, 0.0%)	0/10234 = 0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	80	76.3/10234 = 0.7% (0.1%, 5.3%)	0/10234 = 0% (0.0%, 0.0%)	0/10234 = 0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	80	0/10234 = 0% (0.0%, 0.0%)	0/10234 = 0% (0.0%, 0.0%)	0/10234 = 0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	147	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	147	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	147	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)	1098/1098 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	482	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	128	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	83	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	83	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	83	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	123	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	123	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	123	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	482	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)	2777/2777 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	128	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)	287/287 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	83	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	83	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	83	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)	0/3125 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age \geq 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	123	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	123	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	123	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)	259/259 = 100.0% (100.0%, 100.0%)

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

Table 3c. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Risk for Severe Covid-19								
At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	469	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	125	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	84	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	84	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	84	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	123	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)	328.8/331.2 = 99.3% (94.8%, 99.9%)
At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	123	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	123	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	469	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)	3736.6/3736.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	125	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)	368.8/368.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	84	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	84	76.3/4096.4 = 1.9% (0.2%, 12.6%)	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	84	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)	0/4096.4 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	123	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	123	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	123	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)	331.2/331.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	445	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9531.4/9558.4 = 99.7% (98.0%, 100.0%)	9531.4/9558.4 = 99.7% (98.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)	9558.4/9558.4 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	149	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)	1063.2/1063.2 = 100.0% (100.0%, 100.0%)

(continued)

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	147	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	147	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	147	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)	1025.8/1025.8 = 100.0% (100.0%, 100.0%)

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

Table 3d. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Age, Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age, Risk for Severe Covid-19								
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	214	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	73	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	40	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	40	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	40	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	75	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)	223.5/226 = 98.9% (92.3%, 99.9%)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	75	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	75	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	214	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)	2279/2279 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	73	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)	248/248 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	40	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	40	76.3/2454 = 3.1% (0.4%, 20.6%)	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	40	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)	0/2454 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	75	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	75	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	75	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)	226/226 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	218	8239/8239 = 100.0% (100.0%, 100.0%)	8212.1/8239 = 99.7% (97.7%, 100.0%)	8212.1/8239 = 99.7% (97.7%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)	8239/8239 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	73	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)	897/897 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	40	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	40	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	40	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)	0/7780 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	72	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	72	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)

(continued)

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	72	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)	872/872 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	255	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	52	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	44	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	44	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	44	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	48	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	48	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	48	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	255	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)	1457.6/1457.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	52	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)	120.8/120.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	44	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	44	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	44	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)	0/1642.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	48	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	48	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age \geq 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	48	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	227	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)	1319.4/1319.4 = 100.0% (100.0%, 100.0%)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	76	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)	166.2/166.2 = 100.0% (100.0%, 100.0%)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	39	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	39	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	39	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)	0/1482.6 = 0.0% (0.0%, 0.0%)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	75	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	75	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)

(continued)

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	75	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)	153.8/153.8 = 100.0% (100.0%, 100.0%)

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

Table 3e. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Sex								
Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	395	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	121	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	76	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	76	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	76	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	115	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)	526.8/529.2 = 99.5% (96.7%, 99.9%)
Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	115	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	115	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	395	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)	5298.6/5298.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	121	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)	564.7/564.7 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	76	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	76	76.3/4771.7 = 1.6% (0.2%, 11.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	76	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)	0/4771.7 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	115	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	115	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	115	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)	529.2/529.2 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	519	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 99.7% (97.6%, 100.0%)	7996.4/7996.4 = 99.7% (97.6%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)	7996.4/7996.4 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	153	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)	867.3/867.3 = 100.0% (100.0%, 100.0%)

(continued)

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	155	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	155	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	155	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)	827.8/827.8 = 100.0% (100.0%, 100.0%)

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

Table 3f. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Age, sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age, sex								
Age < 65 Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	269	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6497.4/6524.4 = 99.6% (97.1%, 99.9%)	6497.4/6524.4 = 99.6% (97.1%, 99.9%)
Age < 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)	6524.4/6524.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	79	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)	701.8/701.8 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	52	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	52	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	52	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)	0/7188.8 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	83	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	83	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)

(continued)

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	83	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)	673.1/673.1 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	163	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	67	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)	443.2/443.2 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	28	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	28	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)	0/3045.2 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	64	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)	422.4/424.9 = 99.4% (95.8%, 99.9%)
Age < 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	64	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	64	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)	424.9/424.9 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	163	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)	3993.6/3993.6 = 100.0% (100.0%, 100.0%)

(continued)

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

(continued)

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

(continued)

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age ≥ 65 Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	72	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	72	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	72	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	250	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)	1472/1472 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	74	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)	165.5/165.5 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	35	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	35	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	35	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)	0/1398.4 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age \geq 65 Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	72	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)
Age \geq 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	72	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)
Age \geq 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	72	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)	154.6/154.6 = 100.0% (100.0%, 100.0%)

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

Table 3g. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Hispanic or Latino ethnicity

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Hispanic or Latino ethnicity								
Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	136	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	35	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	20	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	20	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	20	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	38	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	38	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	38	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	136	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)	1363.4/1363.4 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	35	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)	145.7/145.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	20	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	20	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	20	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)	0/1237.6 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	38	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	38	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	38	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)	133.7/133.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	690	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10454.2/10481.2 = 99.7% (98.2%, 100.0%)	10454.2/10481.2 = 99.7% (98.2%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)	10481.2/10481.2 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	217	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)	1162.3/1162.3 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	130	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	130	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	130	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)	0/10828.8 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	214	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1119.3/1121.8 = 99.8% (98.4%, 100.0%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	214	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)

(continued)

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	214	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)	1121.8/1121.8 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	88	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)	1450.4/1450.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	22	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)	124/124 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	13	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	13	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	13	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)	0/1292.7 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	18	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	18	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)

(continued)

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	18	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)	101.5/101.5 = 100.0% (100.0%, 100.0%)

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

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Table 3h. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Race

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	67	76.3/6586.8 = 1.2% (0.2%, 8.1%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	195	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	1985.2/2012.2 = 98.7% (90.9%, 99.8%)	1985.2/2012.2 = 98.7% (90.9%, 99.8%)
Black or African American	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	39	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)
Black or African American	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	39	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Black or African American	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	39	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)
Black or African American	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	60	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)	262.6/265.1 = 99.1% (93.4%, 99.9%)
Black or African American	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	60	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	60	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	195	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)	2012.2/2012.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Black or African American	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)	195.6/195.6 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	39	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	39	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	39	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)	0/2311.6 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	60	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	60	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	60	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)	265.1/265.1 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	67	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)	673.6/673.6 = 100.0% (100.0%, 100.0%)

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Not reported and unknown	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	14	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	14	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	14	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)	0/1337.6 = 0.0% (0.0%, 0.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	24	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	24	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	24	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)	165.4/165.4 = 100.0% (100.0%, 100.0%)

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

Table 3i. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Underrepresented minority status								
Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	420	4289/4289 = 100.0% (100.0%, 100.0%)	4262.1/4289 = 99.4% (95.6%, 99.9%)	4262.1/4289 = 99.4% (95.6%, 99.9%)
Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)	4289/4289 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	120	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)	462/462 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	73	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	73	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	73	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)	0/4319 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	111	439/439 = 100.0% (100.0%, 100.0%)	439/439 = 100.0% (100.0%, 100.0%)	436.5/439 = 99.4% (96.0%, 99.9%)
Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	111	439/439 = 100.0% (100.0%, 100.0%)	439/439 = 100.0% (100.0%, 100.0%)	439/439 = 100.0% (100.0%, 100.0%)

(continued)

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

(continued)

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)	6597/6597 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)	773.8/773.8 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	67	76.3/6586.8 = 1.2% (0.2%, 8.1%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	67	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)	0/6586.8 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	121	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)	666.4/666.4 = 100.0% (100.0%, 100.0%)

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

Table 3j. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Age, Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age, Underrepresented minority status								
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	192	3386/3386 = 100.0% (100.0%, 100.0%)	3359.1/3386 = 99.2% (94.5%, 99.9%)	3359.1/3386 = 99.2% (94.5%, 99.9%)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	69	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	37	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	37	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	37	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)	0/3281 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	61	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)	358.5/361 = 99.3% (95.1%, 99.9%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)	361/361 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	192	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)	3386/3386 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	69	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)	375/375 = 100.0% (100.0%, 100.0%)

(continued)

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

(continued)

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

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2xLLOD	% Greater than 4xLLOD
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	517.6/517.6 = 100.0% (100.0%, 100.0%)	517.6/517.6 = 100.0% (100.0%, 100.0%)	517.6/517.6 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	175	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)	5217.3/5217.3 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	59	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)	602.4/602.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	31	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	31	76.3/4988.2 = 1.5% (0.2%, 11.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)	0/4988.2 = 0.0% (0.0%, 0.0%)

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

(continued)

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

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

Table 4a. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by All participants

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
All participants						
	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	914	10 (10, 10)
	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	10 (10, 10)
	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	10 (10, 10)
	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	274	10 (10, 10)
	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	10 (10, 10)
	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	10 (10, 10)
	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	163	10 (10, 10)
	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 11)
	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)
	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	270	10 (10, 10)
	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	270	10 (10, 10)
	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	270	10 (10, 10)
	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	914	23543 (19945, 27790)
	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	22926 (19863, 26460)
	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	40963 (36741, 45671)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	274	43010 (33140, 55819)
	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	36133 (28182, 46328)
	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	79981 (65041, 98352)
	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	163	10 (10, 10)
	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 10)
	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)
	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	270	12518 (9458, 16567)
	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	270	12861 (10150, 16296)
	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	270	18191 (15159, 21829)
	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	914	325136 (267241, 395574)
	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	966160 (823437, 1133621)
	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	2087965 (1831068, 2380904)
	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	274	980579 (697583, 1378379)
	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	2298869 (1785648, 2959596)
	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	5346334 (4339333, 6587023)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	163	10 (10, 10)
	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 10)
	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)
	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	270	130008 (92643, 182444)
	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	270	382614 (299829, 488256)
	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	270	676872 (531354, 862241)



Table 4b. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age						
Age < 65	Day 1	Vaccine	Negative	Anti 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	Positive	Anti N IgG (IU/ml)	146	10 (10, 10)
Age < 65	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	10 (10, 10)
Age < 65	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	10 (10, 10)
Age < 65	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	80	10 (10, 11)
Age < 65	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	80	10 (10, 11)
Age < 65	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	147	10 (10, 10)
Age < 65	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)
Age < 65	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)
Age < 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	432	18416 (15002, 22607)
Age < 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	17393 (14565, 20770)
Age < 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	31397 (27475, 35879)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	146	32567 (23744, 44670)
Age < 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	24939 (18393, 33814)
Age < 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	59400 (46119, 76506)
Age < 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	147	9820 (7012, 13753)
Age < 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	147	9737 (7318, 12957)
Age < 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	147	13380 (10752, 16650)
Age < 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	432	253319 (198848, 322710)
Age < 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	737116 (604473, 898866)
Age < 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	1643373 (1397160, 1932976)
Age < 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	146	739998 (487226, 1123907)
Age < 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	1708031 (1250384, 2333179)
Age < 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	4266733 (3292306, 5529560)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	80	10 (10, 10)
Age < 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	147	93772 (62211, 141344)
Age < 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	147	270061 (201183, 362521)
Age < 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	147	484596 (361146, 650244)
Age ≥ 65	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	482	10 (10, 10)
Age ≥ 65	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	10 (10, 10)
Age ≥ 65	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	10 (10, 10)
Age ≥ 65	Day 1	Vaccine	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	Placebo	Negative	Anti N IgG (IU/ml)	83	10 (10, 10)
Age ≥ 65	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	83	10 (10, 10)
Age ≥ 65	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	83	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	123	10 (10, 10)
Age \geq 65	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)
Age \geq 65	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)
Age \geq 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	482	59687 (50609, 70395)
Age \geq 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	65260 (56734, 75068)
Age \geq 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	112166 (98902, 127209)
Age \geq 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	128	130450 (94702, 179694)
Age \geq 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	158619 (123545, 203649)
Age \geq 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	262073 (211994, 323982)
Age \geq 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	83	10 (10, 10)
Age \geq 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	83	10 (10, 10)
Age \geq 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	83	10 (10, 10)
Age \geq 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	123	35028 (24879, 49317)
Age \geq 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	123	41836 (32047, 54614)
Age \geq 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	123	66891 (53117, 84238)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	482	836805 (684275, 1023335)
Age \geq 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	2692372 (2329146, 3112243)
Age \geq 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	5171042 (4536102, 5894857)
Age \geq 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	128	3014476 (2173987, 4179907)
Age \geq 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	7520373 (6146909, 9200723)
Age \geq 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	13148461 (11661345, 14825221)
Age \geq 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	83	10 (10, 10)
Age \geq 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	83	10 (10, 10)
Age \geq 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	83	10 (10, 10)
Age \geq 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	123	519433 (364323, 740581)
Age \geq 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	123	1675605 (1276999, 2198632)
Age \geq 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	123	2790960 (2209589, 3525298)

Table 4c. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Risk for Severe Covid-19						
At-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	469	10 (10, 10)
At-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	10 (10, 10)
At-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	10 (10, 10)
At-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	125	10 (10, 10)
At-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)
At-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)
At-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	84	10 (10, 11)
At-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	123	10 (10, 10)
At-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)
At-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)
At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	469	23746 (19934, 28287)
At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	26276 (22610, 30535)
At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	45842 (40067, 52448)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	125	55180 (40419, 75332)
At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	55528 (43641, 70653)
At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	103862 (82479, 130788)
At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	123	16553 (12215, 22429)
At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	123	16713 (12642, 22096)
At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	123	26705 (21285, 33505)
At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	469	335374 (270080, 416453)
At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	1142597 (961925, 1357205)
At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	2144439 (1840509, 2498559)
At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	125	1327591 (937265, 1880469)
At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	2930270 (2216035, 3874704)
At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	6396516 (5214355, 7846688)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	84	10 (10, 10)
At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	123	197242 (138403, 281094)
At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	123	663561 (492320, 894363)
At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	123	1012116 (794913, 1288669)
Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	445	10 (10, 10)
Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	10 (10, 10)
Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	10 (10, 10)
Not at-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	149	10 (10, 10)
Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	10 (10, 10)
Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)
Not at-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	79	10 (10, 11)
Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	79	10 (10, 11)
Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	79	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not at-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	147	10 (10, 11)
Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)
Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)
Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	445	23464 (18827, 29244)
Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	21736 (17965, 26298)
Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	39200 (34023, 45165)
Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	149	39449 (28242, 55103)
Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	31130 (22510, 43050)
Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	73051 (55946, 95386)
Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	79	10 (10, 10)
Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	79	10 (10, 10)
Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	79	10 (10, 10)
Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	147	11438 (8001, 16352)
Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	147	11818 (8756, 15950)
Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	147	16070 (12770, 20222)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	445	321219 (247884, 416250)
Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	904842 (732112, 1118324)
Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	2066294 (1739231, 2454861)
Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	149	882754 (567083, 1374143)
Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	2113273 (1525010, 2928453)
Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	5023873 (3827375, 6594416)
Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	79	10 (10, 10)
Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	79	10 (10, 10)
Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	79	10 (10, 10)
Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	147	113637 (73666, 175296)
Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	147	320294 (235413, 435781)
Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	147	594413 (435730, 810886)

Table 4d. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age, Risk for Severe Covid-19						
Age < 65 At-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	214	10 (10, 10)
Age < 65 At-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	10 (10, 10)
Age < 65 At-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	10 (10, 10)
Age < 65 At-risk	Day 1	Vaccine	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	Placebo	Negative	Anti N IgG (IU/ml)	40	10 (10, 10)
Age < 65 At-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 10)
Age < 65 At-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 11)
Age < 65 At-risk	Day 1	Placebo	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)
Age < 65 At-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	214	15066 (11800, 19236)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	16530 (13368, 20441)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	31028 (25725, 37423)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	73	35719 (23749, 53721)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	30603 (22501, 41623)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	62641 (46271, 84801)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	40	10 (10, 10)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 10)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 10)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	75	11526 (8014, 16577)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10221 (7219, 14470)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	75	16112 (12299, 21107)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	214	227691 (168852, 307033)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	761200 (595277, 973370)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	1498825 (1211392, 1854460)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	73	848831 (532838, 1352218)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	1815884 (1228679, 2683724)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	4547755 (3405518, 6073108)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	40	10 (10, 10)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 11)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 10)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	75	115913 (72906, 184288)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	75	417627 (286526, 608715)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	75	575539 (423609, 781958)
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	218	10 (10, 10)
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	10 (10, 10)
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	10 (10, 10)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	73	10 (10, 10)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	40	10 (10, 11)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 11)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	72	10 (10, 11)
Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)
Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	218	19467 (15117, 25069)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	17639 (14174, 21953)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	31500 (26782, 37050)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	73	31746 (21553, 46760)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	23567 (16129, 34434)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	58534 (42846, 79967)
Age < 65 Not at-risk	Day 29	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	Positive	Anti N IgG (IU/ml)	72	9421 (6230, 14246)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	72	9616 (6788, 13622)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	72	12751 (9770, 16642)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	218	260904 (193707, 351412)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	730590 (572430, 932450)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	1685764 (1382036, 2056240)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	73	712451 (424544, 1195605)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	1679359 (1144789, 2463552)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	4192147 (3040678, 5779665)
Age < 65 Not at-risk	Day 57	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	Positive	Anti N IgG (IU/ml)	72	88760 (53701, 146707)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	72	241209 (168681, 344922)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	72	463469 (322830, 665378)
Age ≥ 65 At-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	255	10 (10, 10)
Age ≥ 65 At-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	10 (10, 10)
Age ≥ 65 At-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 At-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	52	10 (10, 10)
Age \geq 65 At-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Age \geq 65 At-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Age \geq 65 At-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 At-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	48	10 (10, 11)
Age \geq 65 At-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	255	48363 (38230, 61183)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	54232 (44615, 65922)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	84391 (70325, 101269)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	52	134756 (86047, 211040)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	188670 (129392, 275106)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	293282 (210942, 407763)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	48	36017 (20724, 62595)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	48	48060 (30237, 76388)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	48	79058 (52125, 119908)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	255	614449 (455495, 828875)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	2156196 (1736284, 2677662)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	3754377 (3053564, 4616033)
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	52	3325369 (2089439, 5292368)
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	7826271 (5853680, 10463591)
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	12884976 (10641883, 15600868)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	44	10 (10, 10)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	44	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	48	617829 (374065, 1020446)
Age \geq 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	48	1793880 (1112795, 2891824)
Age \geq 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	48	3402410 (2325361, 4978321)
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	227	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	76	10 (10, 11)
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	75	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	227	75305 (60091, 94371)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	80069 (65707, 97571)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	153593 (130667, 180543)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	76	127407 (81244, 199800)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	139826 (99996, 195520)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	241494 (182978, 318724)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	75	34367 (22390, 52751)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	75	38048 (27669, 52321)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	75	59664 (45819, 77691)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	227	1177109 (909148, 1524048)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	3441017 (2860842, 4138850)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	7365218 (6408010, 8465410)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	76	2806906 (1779671, 4427066)
Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	7305563 (5522547, 9664247)
Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	13343347 (11421210, 15588971)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	75	461295 (282331, 753702)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	75	1599200 (1156266, 2211811)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	75	2437171 (1815977, 3270859)

Table 4e. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Sex						
Male	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	395	10 (10, 10)
Male	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	10 (10, 10)
Male	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	10 (10, 10)
Male	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	121	10 (10, 10)
Male	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)
Male	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)
Male	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	76	10 (10, 11)
Male	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	76	11 (9, 12)
Male	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	76	10 (10, 10)
Male	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	115	10 (10, 10)
Male	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	115	10 (10, 10)
Male	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	115	10 (10, 10)
Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	395	27118 (20803, 35351)
Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	25738 (20110, 32941)
Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	40290 (34397, 47193)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	121	52664 (36905, 75154)
Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	43301 (30763, 60949)
Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	83762 (65541, 107048)
Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	76	10 (10, 10)
Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	76	10 (10, 10)
Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	76	10 (10, 10)
Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	115	11707 (7655, 17903)
Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	115	12838 (8743, 18852)
Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	115	16359 (12044, 22219)
Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	395	358185 (259645, 494122)
Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	1032572 (803692, 1326633)
Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	2448348 (1992531, 3008439)
Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	121	1379076 (895389, 2124049)
Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	2628794 (1842173, 3751308)
Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	5518909 (4222583, 7213204)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	76	10 (10, 10)
Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	76	10 (10, 10)
Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	76	10 (10, 10)
Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	115	120405 (68919, 210356)
Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	115	361345 (243436, 536364)
Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	115	578439 (406742, 822616)
Female	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	519	10 (10, 10)
Female	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	10 (10, 10)
Female	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	10 (10, 10)
Female	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	153	10 (10, 10)
Female	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	10 (10, 10)
Female	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	10 (10, 10)
Female	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	87	10 (10, 10)
Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)
Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Female	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	155	10 (10, 11)
Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	155	10 (10, 10)
Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	155	10 (10, 10)
Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	519	21438 (17319, 26535)
Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	21234 (17837, 25278)
Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	41415 (35725, 48012)
Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	153	37697 (26222, 54193)
Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	32117 (22658, 45526)
Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	77611 (57216, 105276)
Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	87	10 (10, 10)
Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)
Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)
Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	155	13066 (8983, 19004)
Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	155	12876 (9489, 17472)
Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	155	19468 (15496, 24459)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	519	304934 (237911, 390840)
Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	924524 (750510, 1138886)
Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	1878895 (1586011, 2225864)
Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	153	785331 (484933, 1271815)
Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	2106655 (1490680, 2977161)
Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	5236885 (3880756, 7066912)
Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	87	10 (10, 10)
Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)
Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)
Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	155	136546 (89268, 208864)
Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	155	396863 (289955, 543189)
Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	155	748414 (540245, 1036794)

Table 4f. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age, sex						
Age < 65 Female	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	269	10 (10, 10)
Age < 65 Female	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	10 (10, 10)
Age < 65 Female	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	10 (10, 10)
Age < 65 Female	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	79	10 (10, 10)
Age < 65 Female	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	10 (10, 10)
Age < 65 Female	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	10 (10, 10)
Age < 65 Female	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	83	10 (10, 11)
Age < 65 Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	83	10 (10, 10)
Age < 65 Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	83	10 (10, 10)
Age < 65 Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	269	17005 (13156, 21980)
Age < 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	16543 (13418, 20396)
Age < 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	32705 (27399, 39039)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	79	27788 (17970, 42970)
Age < 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	21789 (14248, 33321)
Age < 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	56962 (39317, 82526)
Age < 65 Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	83	10603 (6760, 16631)
Age < 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	83	10100 (6984, 14608)
Age < 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	83	14961 (11369, 19689)
Age < 65 Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	269	240348 (178375, 323851)
Age < 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	725439 (563976, 933126)
Age < 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	1494002 (1218429, 1831901)
Age < 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	79	582852 (324144, 1048040)
Age < 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	1557246 (1019727, 2378101)
Age < 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	4234642 (2930914, 6118296)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Age < 65 Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	83	100999 (60463, 168711)
Age < 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	83	293632 (201048, 428852)
Age < 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	83	571578 (384900, 848795)
Age < 65 Male	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	163	10 (10, 10)
Age < 65 Male	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 10)
Age < 65 Male	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)
Age < 65 Male	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	67	10 (10, 10)
Age < 65 Male	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	10 (10, 10)
Age < 65 Male	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	10 (10, 10)
Age < 65 Male	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	28	11 (9, 12)
Age < 65 Male	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	28	11 (9, 13)
Age < 65 Male	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	28	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Male	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	64	10 (10, 10)
Age < 65 Male	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	64	10 (10, 10)
Age < 65 Male	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	64	10 (10, 10)
Age < 65 Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	163	20977 (14896, 29540)
Age < 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	18877 (13705, 26001)
Age < 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	29372 (24030, 35901)
Age < 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	67	41875 (27088, 64734)
Age < 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	30884 (20281, 47031)
Age < 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	63477 (47023, 85688)
Age < 65 Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	28	10 (10, 10)
Age < 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	28	10 (10, 10)
Age < 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	28	10 (10, 10)
Age < 65 Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	64	8697 (5222, 14483)
Age < 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	64	9188 (5784, 14598)
Age < 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	64	11210 (7775, 16161)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	163	276033 (182277, 418013)
Age < 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	756600 (546757, 1046981)
Age < 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	1920202 (1472176, 2504576)
Age < 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	67	1079995 (633450, 1841326)
Age < 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	1977267 (1268954, 3080952)
Age < 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	4318054 (3077671, 6058343)
Age < 65 Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	28	10 (10, 10)
Age < 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	28	10 (10, 11)
Age < 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	28	10 (10, 10)
Age < 65 Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	64	83366 (42296, 164315)
Age < 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	64	236528 (146661, 381460)
Age < 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	64	373064 (243212, 572245)
Age ≥ 65 Male	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	232	10 (10, 10)
Age ≥ 65 Male	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	10 (10, 10)
Age ≥ 65 Male	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Male	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	54	10 (10, 11)
Age \geq 65 Male	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	10 (10, 10)
Age \geq 65 Male	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	10 (10, 10)
Age \geq 65 Male	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	51	10 (10, 10)
Age \geq 65 Male	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)
Age \geq 65 Male	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)
Age \geq 65 Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	232	59503 (46453, 76219)
Age \geq 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	66467 (53933, 81913)
Age \geq 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	105989 (87935, 127749)
Age \geq 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	54	121492 (77083, 191487)
Age \geq 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	148457 (98119, 224620)
Age \geq 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	230231 (167261, 316907)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	51	39245 (22100, 69691)
Age \geq 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	51	50082 (30542, 82125)
Age \geq 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	51	76189 (49115, 118188)
Age \geq 65 Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	232	794988 (585435, 1079548)
Age \geq 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	2674328 (2152728, 3322311)
Age \geq 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	5149990 (4231902, 6267253)
Age \geq 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	54	3362752 (2054881, 5503045)
Age \geq 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	7426127 (5296972, 10411111)
Age \geq 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	13502491 (11607977, 15706205)
Age \geq 65 Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	48	10 (10, 10)
Age \geq 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	48	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	51	537607 (291471, 991596)
Age \geq 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	51	2027539 (1259961, 3262731)
Age \geq 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	51	3447429 (2322804, 5116559)
Age \geq 65 Female	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	250	10 (10, 10)
Age \geq 65 Female	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	10 (10, 10)
Age \geq 65 Female	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	10 (10, 10)
Age \geq 65 Female	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	74	10 (10, 10)
Age \geq 65 Female	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	10 (10, 10)
Age \geq 65 Female	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	10 (10, 10)
Age \geq 65 Female	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	72	10 (10, 10)
Age \geq 65 Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)
Age \geq 65 Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	250	59851 (47954, 74699)
Age \geq 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	64209 (53151, 77567)
Age \geq 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	117943 (99447, 139878)
Age \geq 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	74	137448 (87797, 215179)
Age \geq 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	166523 (121761, 227741)
Age \geq 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	288235 (216852, 383115)
Age \geq 65 Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	72	32440 (21159, 49736)
Age \geq 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	72	37051 (27449, 50013)
Age \geq 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	72	61265 (47638, 78789)
Age \geq 65 Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	250	875715 (670811, 1143209)
Age \geq 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	2708471 (2228982, 3291105)
Age \geq 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	5189777 (4355492, 6183867)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	74	2781850 (1795669, 4309643)
Age \geq 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	7590360 (5921961, 9728799)
Age \geq 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	12894340 (10799304, 15395807)
Age \geq 65 Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	35	10 (10, 10)
Age \geq 65 Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	72	507512 (329028, 782814)
Age \geq 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	72	1473236 (1067157, 2033836)
Age \geq 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	72	2420004 (1820068, 3217693)



Table 4g. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Hispanic or Latino ethnicity

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Hispanic or Latino ethnicity						
Hispanic or Latino	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	136	10 (10, 10)
Hispanic or Latino	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	10 (10, 10)
Hispanic or Latino	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	10 (10, 10)
Hispanic or Latino	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	35	10 (10, 10)
Hispanic or Latino	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	10 (10, 10)
Hispanic or Latino	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	10 (10, 10)
Hispanic or Latino	Day 1	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	Positive	Anti N IgG (IU/ml)	38	10 (10, 10)
Hispanic or Latino	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	38	10 (10, 10)
Hispanic or Latino	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	38	10 (10, 10)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	136	22074 (14121, 34506)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	22266 (15847, 31284)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	41773 (31562, 55289)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	35	66150 (37538, 116570)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	57339 (30559, 107588)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	90332 (50343, 162084)
Hispanic or Latino	Day 29	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, 10)
Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	20	10 (10, 10)
Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	38	26345 (9909, 70041)
Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	38	34815 (16110, 75239)
Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	38	26708 (12585, 56680)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	136	332872 (193115, 573771)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	1087406 (737091, 1604213)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	2082654 (1564176, 2772993)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	35	1420449 (558648, 3611715)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	2735111 (1368395, 5466868)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	7578287 (5040721, 11393296)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
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)
Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	20	10 (10, 10)
Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	38	452690 (158709, 1291220)
Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	38	747435 (391924, 1425424)
Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	38	1403460 (609038, 3234119)
Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	690	10 (10, 10)
Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	10 (10, 10)
Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	10 (10, 10)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	217	10 (10, 10)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	10 (10, 10)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	10 (10, 10)
Not Hispanic or Latino	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	130	10 (10, 11)
Not Hispanic or Latino	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	130	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not Hispanic or Latino	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	214	10 (10, 10)
Not Hispanic or Latino	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	214	10 (10, 10)
Not Hispanic or Latino	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	214	10 (10, 10)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	690	23655 (19521, 28664)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	23020 (19425, 27280)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	39694 (35055, 44946)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	217	41747 (30714, 56743)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	35344 (26390, 47337)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	83383 (65546, 106075)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	214	12063 (8992, 16185)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	214	11608 (9046, 14896)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	214	18056 (14910, 21865)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	690	334364 (266627, 419309)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	987977 (822264, 1187086)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	2063432 (1775937, 2397468)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	217	968852 (654113, 1435033)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	2315554 (1731123, 3097290)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	5301268 (4150604, 6770929)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	130	10 (10, 10)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	214	129424 (89788, 186557)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	214	381696 (293138, 497006)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	214	648311 (505732, 831086)
Not reported and unknown	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	88	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	22	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	13	12 (8, 18)
Not reported and unknown	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	18	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	18	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	18	10 (10, 10)
Not reported and unknown	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	88	24172 (15240, 38338)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	22876 (15904, 32905)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	50488 (35885, 71034)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	22	34292 (18107, 64943)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	25827 (18334, 36382)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	46903 (33825, 65038)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	18	7067 (1907, 26192)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	18	10750 (3611, 32001)
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	18	11909 (5649, 25107)
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	88	259797 (148513, 454466)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	735710 (462524, 1170251)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	2279592 (1446853, 3591615)
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	22	710026 (245263, 2055490)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	1751283 (872333, 3515850)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	3840709 (2197166, 6713669)
Not reported and unknown	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	13	10 (10, 10)
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	18	26411 (10028, 69563)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	18	162620 (55659, 475135)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	18	417076 (107739, 1614570)

MOCK

Table 4h. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Race

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Race						
White Non-Hispanic	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	362	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	125	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	67	10 (10, 11)
White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	121	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	362	26952 (20883, 34784)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	23438 (18669, 29425)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	40376 (34349, 47460)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	125	33909 (24023, 47863)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	30985 (21434, 44793)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	72481 (53061, 99008)
White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	121	12594 (8382, 18924)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10931 (7560, 15804)
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	121	18868 (14808, 24043)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	362	328428 (241933, 445846)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	1035293 (809568, 1323956)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	2145772 (1770774, 2600184)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	125	855574 (517613, 1414198)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	1943813 (1349835, 2799166)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	4608987 (3338577, 6362819)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	121	105260 (65764, 168478)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	121	393045 (287516, 537306)
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	121	674526 (485396, 937351)
Black or African American	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	195	10 (10, 10)
Black or African American	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	10 (10, 11)
Black or African American	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	10 (10, 10)
Black or African American	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	52	10 (10, 10)
Black or African American	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Black or African American	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Black or African American	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Black or African American	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	60	10 (10, 10)
Black or African American	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)
Black or African American	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)
Black or African American	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	195	16417 (11437, 23568)
Black or African American	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	18966 (14305, 25146)
Black or African American	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	33478 (26923, 41629)
Black or African American	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	52	70405 (39637, 125057)
Black or African American	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	49806 (32279, 76849)
Black or African American	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	92510 (63827, 134083)
Black or African American	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	60	9803 (5446, 17644)
Black or African American	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	60	13142 (8909, 19387)
Black or African American	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	60	17281 (11001, 27148)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Black or African American	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	195	270892 (186938, 392550)
Black or African American	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	700976 (482795, 1017755)
Black or African American	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	1698222 (1265203, 2279444)
Black or African American	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	52	1211651 (545292, 2692316)
Black or African American	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	3863173 (2496394, 5978266)
Black or African American	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	5233980 (3292870, 8319352)
Black or African American	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)
Black or African American	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	60	162243 (80633, 326450)
Black or African American	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	60	304404 (168043, 551417)
Black or African American	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	60	604842 (358324, 1020956)
Asian	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	67	10 (10, 10)
Asian	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
Asian	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Asian	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	24	10 (10, 11)
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	Placebo	Negative	Anti N IgG (IU/ml)	12	10 (10, 10)
Asian	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	12	10 (10, 10)
Asian	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	12	10 (10, 10)
Asian	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	13	10 (10, 10)
Asian	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	13	10 (10, 10)
Asian	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	13	10 (10, 10)
Asian	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	67	30141 (17403, 52204)
Asian	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	33349 (22259, 49964)
Asian	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	63758 (45931, 88504)
Asian	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	24	33316 (16935, 65545)
Asian	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	24	24553 (12536, 48091)
Asian	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	24	49522 (26709, 91821)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Asian	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	12	10 (10, 10)
Asian	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	12	10 (10, 10)
Asian	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	12	10 (10, 10)
Asian	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	13	17273 (6186, 48234)
Asian	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	13	27396 (5431, 138186)
Asian	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	13	12500 (4740, 32962)
Asian	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	67	759619 (426880, 1351718)
Asian	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	1685637 (1167594, 2433528)
Asian	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	2633046 (1864450, 3718486)
Asian	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	24	639026 (148027, 2758648)
Asian	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	24	2094481 (742718, 5906481)
Asian	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	24	4848443 (2478358, 9485072)
Asian	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	12	10 (10, 10)
Asian	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	12	10 (10, 10)
Asian	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	12	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Asian	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	13	275834 (26204, 2903499)
Asian	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	13	750472 (176753, 3186420)
Asian	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	13	859200 (168867, 4371633)
American Indian or Alaska Native	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	13	10 (10, 10)
American Indian or Alaska Native	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	10 (10, 10)
American Indian or Alaska Native	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)
American Indian or Alaska Native	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	6	10 (10, 10)
American Indian or Alaska Native	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	10 (10, 10)
American Indian or Alaska Native	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	10 (10, 10)
American Indian or Alaska Native	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	4	10 (10, 10)
American Indian or Alaska Native	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	4	10 (10, 10)
American Indian or Alaska Native	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	4	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	13	45133 (16515, 123343)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	42283 (20288, 88120)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	30785 (13439, 70516)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	6	42543 (10105, 179112)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	22761 (8134, 63689)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	85898 (68138, 108288)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	4	3080 (1115, 8510)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	4	7559 (3837, 14892)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	4	5348 (1735, 16488)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	13	982833 (235813, 4096296)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	836025 (283249, 2467576)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	4760602 (2359191, 9606399)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	6	2398314 (427206, 13464021)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	2320038 (501453, 10733961)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	7507181 (3379449, 16676615)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	5	10 (10, 10)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	4	36102 (4722, 276037)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	4	272152 (65917, 1123631)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	4	677711 (214540, 2140827)
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	11 (9, 14)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	5	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	17	114600 (47108, 278791)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	114776 (53301, 247155)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	116196 (67714, 199391)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	5	55095 (9965, 304612)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	44998 (2885, 701952)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	107953 (71167, 163752)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	1	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	1	734 (734, 734)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	1	6237 (6237, 6237)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	1	10844 (10844, 10844)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	17	2236794 (700142, 7146051)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	5533419 (2490433, 12294540)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	7662810 (3323463, 17667914)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	5	513962 (93920, 2812583)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	1828480 (947016, 3530396)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	5139344 (595014, 44390337)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	1	10 (10, 10)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	1	969 (969, 969)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	1	4780 (4780, 4780)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	1	61376 (61376, 61376)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Multiracial	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	52	10 (10, 10)
Multiracial	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)
Multiracial	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)
Multiracial	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	12	10 (10, 10)
Multiracial	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	10 (10, 10)
Multiracial	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	10 (10, 10)
Multiracial	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	19	10 (10, 10)
Multiracial	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	19	10 (10, 10)
Multiracial	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	19	10 (10, 10)
Multiracial	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	52	20542 (10447, 40388)
Multiracial	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	21505 (13701, 33755)
Multiracial	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	45067 (27165, 74765)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Multiracial	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	12	70589 (26321, 189314)
Multiracial	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	55196 (16260, 187371)
Multiracial	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	155885 (67996, 357377)
Multiracial	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	19	15871 (7677, 32809)
Multiracial	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	19	24792 (13458, 45670)
Multiracial	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	19	25261 (11298, 56479)
Multiracial	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	52	214922 (107912, 428046)
Multiracial	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	1262157 (710446, 2242309)
Multiracial	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	2195866 (1476648, 3265387)
Multiracial	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	12	1276135 (551639, 2952150)
Multiracial	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	3777504 (1786314, 7988255)
Multiracial	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	8118223 (3167974, 20803689)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Multiracial	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	8	10 (10, 10)
Multiracial	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	19	235861 (101669, 547174)
Multiracial	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	19	693982 (285837, 1684912)
Multiracial	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	19	791515 (327732, 1911609)
Other	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	34	10 (10, 10)
Other	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	10 (10, 10)
Other	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	10 (10, 10)
Other	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	7	10 (10, 10)
Other	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	10 (10, 10)
Other	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	10 (10, 10)
Other	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	4	10 (10, 10)
Other	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	4	10 (10, 10)
Other	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	4	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Other	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	5	10 (10, 10)
Other	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)
Other	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)
Other	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	34	21653 (9122, 51401)
Other	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	22295 (11570, 42963)
Other	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	38007 (21259, 67950)
Other	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	7	18596 (5457, 63367)
Other	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	18039 (7489, 43449)
Other	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	75844 (32129, 179037)
Other	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	4	10 (10, 10)
Other	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	4	10 (10, 10)
Other	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	4	10 (10, 10)
Other	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	5	44670 (548, 3638655)
Other	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	5	49870 (993, 2505753)
Other	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	5	40496 (1871, 876366)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Other	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	34	460615 (152205, 1393948)
Other	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	959325 (467189, 1969877)
Other	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	2238776 (1221484, 4103302)
Other	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	7	506707 (112863, 2274911)
Other	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	4612046 (1663462, 12787169)
Other	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	5745695 (3340937, 9881364)
Other	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	4	10 (10, 10)
Other	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	4	10 (10, 10)
Other	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	4	10 (10, 10)
Other	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	5	635834 (21972, 18400096)
Other	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	5	390164 (12362, 12313729)
Other	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	5	1950467 (62864, 60516607)
Not reported and unknown	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	87	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	20	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	10 (10, 10)
Not reported and unknown	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	24	11 (9, 14)
Not reported and unknown	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	24	10 (10, 10)
Not reported and unknown	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	24	10 (10, 10)
Not reported and unknown	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	87	19313 (11899, 31347)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	19972 (12070, 33047)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	41499 (27382, 62895)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	20	67460 (18205, 249984)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	57668 (23639, 140684)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	112437 (52711, 239834)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	24	15732 (6215, 39822)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	24	11890 (6465, 21867)
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	24	17779 (10512, 30069)
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	87	313760 (169470, 580901)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	958206 (602856, 1523015)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	1898203 (1201387, 2999181)
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	20	1890562 (655546, 5452282)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	3239260 (1199389, 8748461)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	9280577 (5784309, 14890128)
Not reported and unknown	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	14	10 (10, 10)
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	14	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	24	212439 (58037, 777613)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	24	401782 (153583, 1051084)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	24	645039 (295340, 1408800)

MOCK

Table 4i. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Underrepresented minority status						
Communities of Color	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	420	10 (10, 10)
Communities of Color	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	10 (10, 10)
Communities of Color	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	10 (10, 10)
Communities of Color	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	120	10 (10, 10)
Communities of Color	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	10 (10, 10)
Communities of Color	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	10 (10, 10)
Communities of Color	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	111	10 (10, 10)
Communities of Color	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	111	10 (10, 10)
Communities of Color	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	111	10 (10, 10)
Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	420	21539 (16824, 27575)
Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	23355 (19242, 28347)
Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	40216 (34320, 47124)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	120	59825 (42571, 84073)
Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	44605 (32113, 61955)
Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	90964 (70627, 117156)
Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	111	12076 (7763, 18784)
Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	111	17596 (12331, 25109)
Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	111	18884 (13334, 26743)
Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	420	358864 (270757, 475643)
Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	977894 (775549, 1233031)
Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	2083276 (1732503, 2505069)
Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	120	1149410 (702292, 1881190)
Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	3146770 (2273084, 4356267)
Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	5991417 (4527248, 7929117)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	73	10 (10, 10)
Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	111	193321 (112530, 332117)
Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	111	397884 (256621, 616908)
Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	111	734879 (489927, 1102301)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	362	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	125	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	67	10 (10, 11)
White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	121	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)
White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	362	26952 (20883, 34784)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	23438 (18669, 29425)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	40376 (34349, 47460)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	125	33909 (24023, 47863)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	30985 (21434, 44793)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	72481 (53061, 99008)
White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	121	12594 (8382, 18924)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10931 (7560, 15804)
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	121	18868 (14808, 24043)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	362	328428 (241933, 445846)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	1035293 (809568, 1323956)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	2145772 (1770774, 2600184)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	125	855574 (517613, 1414198)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	1943813 (1349835, 2799166)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	4608987 (3338577, 6362819)
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	121	105260 (65764, 168478)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	121	393045 (287516, 537306)
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	121	674526 (485396, 937351)

Table 4j. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age, Underrepresented minority status						
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	192	10 (10, 10)
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	10 (10, 10)
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	10 (10, 10)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	69	10 (10, 10)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	10 (10, 10)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	10 (10, 10)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	61	10 (10, 10)
Age < 65 Communities of Color	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)
Age < 65 Communities of Color	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	192	16236 (11950, 22060)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	17593 (13852, 22344)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	30531 (25113, 37119)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	69	50828 (33992, 76001)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	34937 (23612, 51692)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	70998 (52424, 96153)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	61	9484 (5617, 16014)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	13618 (8923, 20783)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	13717 (9065, 20756)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	192	292558 (206172, 415140)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	741900 (555661, 990562)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	1629402 (1297120, 2046806)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	69	930919 (513604, 1687309)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	2542683 (1712040, 3776334)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	5081700 (3610831, 7151727)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	37	10 (10, 10)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	61	145989 (76394, 278984)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	61	277278 (163947, 468952)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	61	543679 (333997, 884998)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	175	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	59	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	31	10 (10, 11)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	31	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
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)
Age < 65 White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	175	22546 (16449, 30904)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	18239 (13758, 24181)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	31442 (25791, 38330)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	59	22816 (14927, 34875)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	19045 (11981, 30275)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	50450 (34089, 74664)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	61	9218 (5562, 15276)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	7844 (4943, 12447)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	13337 (9897, 17972)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	175	264562 (181376, 385898)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	821667 (605817, 1114423)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	1724310 (1360533, 2185355)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	59	596002 (316557, 1122130)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	1330657 (839177, 2109982)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	3419951 (2265916, 5161739)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	31	10 (10, 10)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	61	69600 (38639, 125369)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	61	264698 (179593, 390131)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	61	451492 (299075, 681584)
Age ≥ 65 Communities of Color	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	228	10 (10, 10)
Age ≥ 65 Communities of Color	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	10 (10, 10)
Age ≥ 65 Communities of Color	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Communities of Color	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	51	10 (10, 11)
Age \geq 65 Communities of Color	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)
Age \geq 65 Communities of Color	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)
Age \geq 65 Communities of Color	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	50	10 (10, 11)
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	50	10 (10, 10)
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	50	10 (10, 10)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	228	62158 (49075, 78729)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	67566 (54928, 83111)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	113000 (94968, 134457)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	51	120781 (72698, 200668)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	127850 (82403, 198362)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	264698 (193965, 361225)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	50	36935 (21250, 64196)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	50	57615 (37847, 87707)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	50	82913 (55530, 123801)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	228	771969 (594098, 1003095)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	2754587 (2268630, 3344640)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	5234940 (4335352, 6321193)
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	51	2851970 (1691139, 4809619)
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	7886529 (5982602, 10396367)
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	12184499 (9858697, 15058989)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	50	709142 (413162, 1217155)
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	50	2116643 (1388474, 3226693)
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	50	2964324 (2089369, 4205680)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	187	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	66	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	60	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	187	52931 (40926, 68456)
Age \geq 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	60501 (48781, 75037)
Age \geq 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	103956 (85919, 125780)
Age \geq 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	66	136437 (87480, 212792)
Age \geq 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	171330 (122104, 240402)
Age \geq 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	258922 (193660, 346179)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	60	37306 (22911, 60744)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	60	34684 (23682, 50795)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	60	63090 (45886, 86746)
Age \geq 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	187	744013 (543887, 1017778)
Age \geq 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	2480906 (1963293, 3134986)
Age \geq 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	4905828 (4009921, 6001900)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	66	3047576 (1943331, 4779276)
Age \geq 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	7361735 (5495760, 9861264)
Age \geq 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	13150407 (11178796, 15469753)
Age \geq 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)
Age \geq 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	60	443960 (270210, 729435)
Age \geq 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	60	1555275 (1070146, 2260326)
Age \geq 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	60	2726537 (1931325, 3849174)

Table 5a. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by All participants

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
All participants								
	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	914	10 (10, 10)	23543 (19945, 27790)	2348.16 (1989.36, 2771.67)
	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	10 (10, 10)	22926 (19863, 26460)	2279.09 (1975.09, 2629.88)
	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	10 (10, 10)	40963 (36741, 45671)	4091.68 (3670.04, 4561.76)
	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	274	10 (10, 10)	43010 (33140, 55819)	4284.83 (3302.19, 5559.89)
	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	10 (10, 10)	36133 (28182, 46328)	3613.33 (2818.21, 4632.79)
	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	10 (10, 10)	79981 (65041, 98352)	7998.08 (6504.13, 9835.19)
	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	163	10 (10, 10)	10 (10, 10)	0.98 (0.95, 1.02)
	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 11)	10 (10, 10)	0.98 (0.95, 1.02)
	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	270	10 (10, 10)	12518 (9458, 16567)	1232.97 (937.69, 1621.23)
	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	270	10 (10, 10)	12861 (10150, 16296)	1284.22 (1013.60, 1627.09)
	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	270	10 (10, 10)	18191 (15159, 21829)	1819.07 (1515.87, 2182.92)
	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	914	10 (10, 10)	325136 (267241, 395574)	32428.78 (26656.24, 39451.39)
	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	914	10 (10, 10)	966160 (823437, 1133621)	96047.59 (81866.19, 112685.58)
	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	914	10 (10, 10)	2087965 (1831068, 2380904)	208560.44 (182899.78, 237821.27)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	274	10 (10, 10)	980579 (697583, 1378379)	97689.42 (69501.88, 137308.83)
	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	274	10 (10, 10)	2298869 (1785648, 2959596)	229886.89 (178564.83, 295959.65)
	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	274	10 (10, 10)	5346334 (4339333, 6587023)	534633.43 (433933.34, 658702.34)
	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	163	10 (10, 10)	10 (10, 10)	0.98 (0.95, 1.02)
	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 11)	10 (10, 10)	0.99 (0.95, 1.02)
	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	270	10 (10, 10)	130008 (92643, 182444)	12805.53 (9188.90, 17845.62)
	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	270	10 (10, 10)	382614 (299829, 488256)	38205.28 (29939.10, 48753.76)
	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	270	10 (10, 10)	676872 (531354, 862241)	67687.19 (53135.41, 86224.15)

Table 5b. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age								
Age < 65	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	432	10 (10, 10)	18416 (15002, 22607)	1838.80 (1497.94, 2257.21)
Age < 65	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	10 (10, 10)	17393 (14565, 20770)	1728.59 (1447.96, 2063.60)
Age < 65	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	10 (10, 10)	31397 (27475, 35879)	3139.72 (2747.52, 3587.91)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	146	10 (10, 10)	32567 (23744, 44670)	3251.72 (2370.72, 4460.12)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	10 (10, 10)	24939 (18393, 33814)	2493.88 (1839.31, 3381.39)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	10 (10, 10)	59400 (46119, 76506)	5940.04 (4611.93, 7650.60)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	80	10 (10, 11)	10 (10, 10)	0.98 (0.94, 1.02)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	80	10 (10, 11)	10 (10, 10)	0.98 (0.93, 1.02)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	80	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Age < 65	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	147	10 (10, 10)	9820 (7012, 13753)	966.54 (695.88, 1342.48)
Age < 65	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)	9737 (7318, 12957)	973.73 (731.75, 1295.73)
Age < 65	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)	13380 (10752, 16650)	1337.99 (1075.18, 1665.05)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	432	10 (10, 10)	253319 (198848, 322710)	25293.56 (19856.49, 32219.39)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	432	10 (10, 10)	737116 (604473, 898866)	73258.07 (60080.95, 89325.22)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	432	10 (10, 10)	1643373 (1397160, 1932976)	164337.35 (139715.98, 193297.60)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	146	10 (10, 10)	739998 (487226, 1123907)	73885.65 (48648.51, 112214.94)
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	146	10 (10, 10)	1708031 (1250384, 2333179)	170803.11 (125038.42, 233317.89)
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	146	10 (10, 10)	4266733 (3292306, 5529560)	426673.25 (329230.63, 552956.04)
Age < 65	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	80	10 (10, 11)	10 (10, 10)	0.98 (0.94, 1.02)
Age < 65	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	80	10 (10, 11)	10 (10, 10)	0.98 (0.93, 1.03)
Age < 65	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	80	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Age < 65	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	147	10 (10, 10)	93772 (62211, 141344)	9229.59 (6177.01, 13790.71)
Age < 65	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)	270061 (201183, 362521)	27006.13 (20118.30, 36252.12)
Age < 65	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)	484596 (361146, 650244)	48459.60 (36114.65, 65024.40)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	482	10 (10, 10)	59687 (50609, 70395)	5928.46 (5026.44, 6992.35)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	10 (10, 10)	65260 (56734, 75068)	6494.31 (5646.18, 7469.84)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	10 (10, 10)	112166 (98902, 127209)	11156.00 (9843.59, 12643.39)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	128	10 (10, 10)	130450 (94702, 179694)	12881.38 (9387.70, 17675.25)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	10 (10, 10)	158619 (123545, 203649)	15861.86 (12354.53, 20364.88)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	10 (10, 10)	262073 (211994, 323982)	26207.29 (21199.35, 32398.25)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	83	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	83	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	83	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	123	10 (10, 10)	35028 (24879, 49317)	3460.86 (2457.33, 4874.22)
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)	41836 (32047, 54614)	4151.56 (3184.55, 5412.22)
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)	66891 (53117, 84238)	6689.12 (5311.68, 8423.77)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	482	10 (10, 10)	836805 (684275, 1023335)	83115.94 (67970.66, 101635.90)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	482	10 (10, 10)	2692372 (2329146, 3112243)	267928.32 (231855.79, 309613.08)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	482	10 (10, 10)	5171042 (4536102, 5894857)	514311.17 (451159.38, 586302.75)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	128	10 (10, 10)	3014476 (2173987, 4179907)	297666.07 (215032.46, 412054.47)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	128	10 (10, 10)	7520373 (6146909, 9200723)	752037.26 (614690.86, 920072.32)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	128	10 (10, 10)	13148461 (11661345, 14825221)	1314846.07 (1166134.50, 1482522.12)
Age ≥ 65	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	83	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	83	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	83	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	123	10 (10, 10)	519433 (364323, 740581)	51321.85 (36024.56, 73114.90)
Age ≥ 65	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)	1675605 (1276999, 2198632)	166277.45 (126741.57, 218146.20)
Age ≥ 65	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)	2790960 (2209589, 3525298)	279096.04 (220958.92, 352529.78)

Table 5c. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Risk for Severe Covid-19								
At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	469	10 (10, 10)	23746 (19934, 28287)	2359.08 (1981.02, 2809.29)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	10 (10, 10)	26276 (22610, 30535)	2615.50 (2250.98, 3039.05)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	10 (10, 10)	45842 (40067, 52448)	4565.75 (3992.37, 5221.47)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	125	10 (10, 10)	55180 (40419, 75332)	5491.58 (4022.46, 7497.26)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	55528 (43641, 70653)	5552.80 (4364.10, 7065.28)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	103862 (82479, 130788)	10386.18 (8247.90, 13078.81)
At-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	84	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	84	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	84	10 (10, 11)	10 (10, 10)	0.98 (0.94, 1.02)
At-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	123	10 (10, 10)	16553 (12215, 22429)	1648.35 (1215.87, 2234.65)
At-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)	16713 (12642, 22096)	1661.32 (1257.58, 2194.67)
At-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)	26705 (21285, 33505)	2670.50 (2128.48, 3350.54)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	469	10 (10, 10)	335374 (270080, 416453)	33318.69 (26852.88, 41341.37)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	469	10 (10, 10)	1142597 (961925, 1357205)	113734.61 (95775.71, 135060.99)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	469	10 (10, 10)	2144439 (1840509, 2498559)	213582.55 (183324.98, 248834.09)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	125	10 (10, 10)	1327591 (937265, 1880469)	132124.36 (93301.15, 187102.17)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	2930270 (2216035, 3874704)	293027.00 (221603.54, 387470.44)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	6396516 (5214355, 7846688)	639651.59 (521435.48, 784668.81)
At-risk	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	84	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)	84	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.04)
At-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	84	10 (10, 11)	10 (10, 10)	0.98 (0.94, 1.02)
At-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	123	10 (10, 10)	197242 (138403, 281094)	19641.88 (13780.65, 27996.01)
At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	123	10 (10, 10)	663561 (492320, 894363)	65958.42 (48940.12, 88894.61)
At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	123	10 (10, 10)	1012116 (794913, 1288669)	101211.63 (79491.29, 128866.87)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	445	10 (10, 10)	23464 (18827, 29244)	2343.90 (1880.63, 2921.30)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	10 (10, 10)	21736 (17965, 26298)	2159.67 (1785.56, 2612.16)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	10 (10, 10)	39200 (34023, 45165)	3920.03 (3402.34, 4516.49)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	149	10 (10, 10)	39449 (28242, 55103)	3931.45 (2815.34, 5490.03)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	10 (10, 10)	31130 (22510, 43050)	3113.00 (2251.05, 4305.00)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)	73051 (55946, 95386)	7305.09 (5594.58, 9538.58)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	79	10 (10, 11)	10 (10, 10)	0.98 (0.93, 1.02)
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	79	10 (10, 11)	10 (10, 10)	0.97 (0.92, 1.03)
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	79	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	147	10 (10, 11)	11438 (8001, 16352)	1122.63 (792.35, 1590.58)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10)	11818 (8756, 15950)	1181.77 (875.58, 1595.05)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10)	16070 (12770, 20222)	1606.98 (1277.02, 2022.19)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	445	10 (10, 10)	321219 (247884, 416250)	32087.38 (24761.78, 41580.21)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	445	10 (10, 10)	904842 (732112, 1118324)	89906.29 (72750.39, 111107.87)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	445	10 (10, 10)	2066294 (1739231, 2454861)	206629.43 (173923.14, 245486.15)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	149	10 (10, 10)	882754 (567083, 1374143)	87975.05 (56520.81, 136933.81)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	149	10 (10, 10)	2113273 (1525010, 2928453)	211327.27 (152501.04, 292845.31)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	149	10 (10, 10)	5023873 (3827375, 6594416)	502387.34 (382737.50, 659441.62)
Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	79	10 (10, 11)	10 (10, 10)	0.98 (0.93, 1.02)
Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	79	10 (10, 11)	10 (10, 10)	0.97 (0.92, 1.03)
Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	79	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	147	10 (10, 11) (73666, 175296)	113637 (7299.59, 17041.87)	11153.41 (7299.59, 17041.87)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	147	10 (10, 10) (235413, 435781)	320294 (23541.29, 43578.07)	32029.42 (23541.29, 43578.07)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	147	10 (10, 10) (435730, 810886)	594413 (43572.97, 81088.58)	59441.32 (43572.97, 81088.58)

Table 5d. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age, Risk for Severe Covid-19								
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	214	10 (10, 10)	15066 (11800, 19236)	1496.11 (1172.51, 1909.02)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	10 (10, 10)	16530 (13368, 20441)	1647.12 (1332.23, 2036.44)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	10 (10, 10)	31028 (25725, 37423)	3102.75 (2572.47, 3742.34)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	73	10 (10, 10)	35719 (23749, 53721)	3546.51 (2357.97, 5334.12)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)	30603 (22501, 41623)	3060.34 (2250.14, 4162.27)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)	62641 (46271, 84801)	6264.08 (4627.13, 8480.14)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	40	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	75	10 (10, 10)	11526 (8014, 16577)	1152.57 (801.38, 1657.66)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)	10221 (7219, 14470)	1022.09 (721.94, 1447.04)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	16112 (12299, 21107)	1611.16 (1229.86, 2110.68)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	214	10 (10, 10)	227691 (168852, 307033)	22610.51 (16792.97, 30443.42)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	214	10 (10, 10)	761200 (595277, 973370)	75848.48 (59325.91, 96972.66)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	214	10 (10, 10)	1498825 (1211392, 1854460)	149882.51 (121139.16, 185445.96)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	73	10 (10, 10)	848831 (532838, 1352218)	84280.25 (52926.74, 134207.39)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)	1815884 (1228679, 2683724)	181588.39 (122867.87, 268372.40)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)	4547755 (3405518, 6073108)	454775.50 (340551.75, 607310.79)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	40	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)	40	10 (10, 10)	10 (10, 11)	1.02 (0.98, 1.07)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	75	10 (10, 10)	115913 (72906, 184288)	11591.25 (7290.61, 18428.80)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)	417627 (286526, 608715)	41762.73 (28652.58, 60871.51)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	575539 (423609, 781958)	57553.86 (42360.90, 78195.85)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	218	10 (10, 10)	19467 (15117, 25069)	1946.75 (1511.74, 2506.93)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	10 (10, 10)	17639 (14174, 21953)	1751.83 (1408.13, 2179.42)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	10 (10, 10)	31500 (26782, 37050)	3150.02 (2678.20, 3704.97)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	73	10 (10, 10)	31746 (21553, 46760)	3174.64 (2155.33, 4675.99)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)	23567 (16129, 34434)	2356.67 (1612.92, 3443.37)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)	58534 (42846, 79967)	5853.44 (4284.64, 7996.66)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	40	10 (10, 11)	10 (10, 10)	0.97 (0.92, 1.03)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	72	10 (10, 11)	9421 (6230, 14246)	923.44 (617.25, 1381.52)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)	9616 (6788, 13622)	961.58 (678.78, 1362.18)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	12751 (9770, 16642)	1275.09 (976.97, 1664.19)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	218	10 (10, 10)	260904 (193707, 351412)	26090.40 (19370.69, 35141.19)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	218	10 (10, 10)	730590 (572430, 932450)	72557.28 (56856.08, 92594.47)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	218	10 (10, 10)	1685764 (1382036, 2056240)	168576.35 (138203.64, 205624.01)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	73	10 (10, 10)	712451 (424544, 1195605)	71245.12 (42454.38, 119560.51)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	73	10 (10, 10)	1679359 (1144789, 2463552)	167935.92 (114478.90, 246355.20)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	73	10 (10, 10)	4192147 (3040678, 5779665)	419214.74 (304067.80, 577966.50)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	40	10 (10, 11)	10 (10, 10)	0.97 (0.92, 1.03)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	40	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	40	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	72	10 (10, 11)	88760 (53701, 146707)	8700.37 (5323.82, 14218.42)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)	241209 (168681, 344922)	24120.91 (16868.12, 34492.19)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	463469 (322830, 665378)	46346.93 (32282.95, 66537.83)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	255	10 (10, 10)	48363 (38230, 61183)	4808.12 (3800.84, 6082.35)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	10 (10, 10)	54232 (44615, 65922)	5389.56 (4435.12, 6549.39)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	10 (10, 10)	84391 (70325, 101269)	8352.45 (6975.06, 10001.82)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	52	10 (10, 10)	134756 (86047, 211040)	13475.64 (8604.68, 21103.95)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)	188670 (129392, 275106)	18867.03 (12939.21, 27510.55)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)	293282 (210942, 407763)	29328.19 (21094.20, 40776.26)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	44	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	44	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	44	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	48	10 (10, 10)	36017 (20724, 62595)	3554.56 (2039.96, 6193.68)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	48	10 (10, 11)	48060 (30237, 76388)	4715.92 (2980.60, 7461.57)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	48	10 (10, 10)	79058 (52125, 119908)	7905.78 (5212.45, 11990.78)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	255	10 (10, 10)	614449 (455495, 828875)	61086.86 (45285.39, 82401.95)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	255	10 (10, 10)	2156196 (1736284, 2677662)	214282.06 (172705.04, 265868.34)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	255	10 (10, 10)	3754377 (3053564, 4616033)	371583.87 (302329.22, 456702.71)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	52	10 (10, 10)	3325369 (2089439, 5292368)	332536.90 (208943.88, 529236.81)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)	7826271 (5853680, 10463591)	782627.11 (585368.05, 1046359.11)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)	12884976 (10641883, 15600868)	1288497.62 (1064188.30, 1560086.81)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	44	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	44	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	44	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	48	10 (10, 10)	617829 (374065, 1020446)	60974.99 (36881.21, 100808.77)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	48	10 (10, 11)	1793880 (1112795, 2891824)	176025.95 (109237.32, 283649.72)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age \geq 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	48	10 (10, 10)	3402410 (2325361, 4978321)	340240.98 (232536.09, 497832.07)
Age \geq 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	227	10 (10, 10)	75305 (60091, 94371)	7472.04 (5960.28, 9367.23)
Age \geq 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	10 (10, 10)	80069 (65707, 97571)	7979.90 (6548.33, 9724.45)
Age \geq 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	10 (10, 10)	153593 (130667, 180543)	15359.34 (13066.69, 18054.25)
Age \geq 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	76	10 (10, 11)	127407 (81244, 199800)	12465.97 (8016.45, 19385.18)
Age \geq 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	10 (10, 10)	139826 (99996, 195520)	13982.56 (9999.60, 19552.00)
Age \geq 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	10 (10, 10)	241494 (182978, 318724)	24149.39 (18297.76, 31872.38)
Age \geq 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	75	10 (10, 10)	34367 (22390, 52751)	3398.18 (2213.28, 5217.45)
Age \geq 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)	38048 (27669, 52321)	3804.83 (2766.90, 5232.12)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	59664 (45819, 77691)	5966.37 (4581.94, 7769.08)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	227	10 (10, 10)	1177109 (909148, 1524048)	116797.25 (90218.92, 151205.51)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	227	10 (10, 10)	3441017 (2860842, 4138850)	342939.68 (285103.95, 412507.88)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	227	10 (10, 10)	7365218 (6408010, 8465410)	736521.80 (640801.04, 846541.01)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	76	10 (10, 11)	2806906 (1779671, 4427066)	274637.99 (174793.56, 431514.90)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	76	10 (10, 10)	7305563 (5522547, 9664247)	730556.35 (552254.70, 966424.70)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	76	10 (10, 10)	13343347 (11421210, 15588971)	1334334.72 (1142121.04, 1558897.08)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	75	10 (10, 10)	461295 (282331, 753702)	45612.82 (27970.09, 74384.08)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	75	10 (10, 10)	1599200 (1156266, 2211811)	159920.02 (115626.58, 221181.10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age \geq 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	75	10 (10, 10)	2437171 (1815977, 3270859)	243717.12 (181597.68, 327085.88)

MOCK

Table 5e. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Sex								
Male	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	395	10 (10, 10)	27118 (20803, 35351)	2707.97 (2077.28, 3530.15)
Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	10 (10, 10)	25738 (20110, 32941)	2547.65 (1992.51, 3257.47)
Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	10 (10, 10)	40290 (34397, 47193)	4021.73 (3433.73, 4710.40)
Male	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	121	10 (10, 10)	52664 (36905, 75154)	5247.05 (3679.29, 7482.84)
Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	43301 (30763, 60949)	4330.07 (3076.26, 6094.90)
Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	83762 (65541, 107048)	8376.20 (6554.14, 10704.79)
Male	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	76	10 (10, 11)	10 (10, 10)	0.96 (0.88, 1.04)
Male	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	76	11 (9, 12)	10 (10, 10)	0.95 (0.85, 1.05)
Male	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	76	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Male	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	115	10 (10, 10)	11707 (7655, 17903)	1170.65 (765.46, 1790.34)
Male	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	115	10 (10, 10)	12838 (8743, 18852)	1283.80 (874.26, 1885.18)
Male	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	115	10 (10, 10)	16359 (12044, 22219)	1635.88 (1204.42, 2221.91)
Male	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	395	10 (10, 10)	358185 (259645, 494122)	35767.67 (25927.56, 49342.34)
Male	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	395	10 (10, 10)	1032572 (803692, 1326633)	102207.86 (79582.66, 131265.36)
Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	395	10 (10, 10)	2443948 (1992531, 3008439)	244392.84 (198889.12, 300307.33)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Male	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	121	10 (10, 10)	1379076 (895389, 2124049)	137399.94 (89225.93, 211583.59)
Male	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	2628794 (1842173, 3751308)	262879.40 (184217.30, 375130.79)
Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	5518909 (4222583, 7213204)	551890.89 (422258.33, 721320.40)
Male	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	76	10 (10, 11)	10 (10, 10)	0.96 (0.88, 1.04)
Male	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	76	11 (9, 12)	10 (10, 10)	0.96 (0.86, 1.07)
Male	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	76	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Male	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	115	10 (10, 10)	120405 (68919, 210356)	12040.55 (6891.87, 21035.63)
Male	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	115	10 (10, 10)	361345 (243436, 536364)	36134.52 (24343.59, 53636.45)
Male	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	115	10 (10, 10)	578439 (406742, 822616)	57843.93 (40674.16, 82261.55)
Female	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	519	10 (10, 10)	21438 (17319, 26535)	2136.48 (1726.18, 2644.32)
Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	10 (10, 10)	21234 (17837, 25278)	2116.93 (1778.05, 2520.39)
Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	10 (10, 10)	41415 (35725, 48012)	4138.70 (3570.16, 4797.78)
Female	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	153	10 (10, 10)	37697 (26222, 54193)	3755.35 (2612.56, 5398.02)
Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	10 (10, 10)	32117 (22658, 45526)	3211.74 (2265.79, 4552.63)
Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	10 (10, 10)	77611 (57216, 105276)	7761.12 (5721.63, 10527.59)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Female	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	87	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Female	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Female	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)	10 (10, 10)	0.99 (0.97, 1.01)
Female	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	155	10 (10, 11)	13066 (8983, 19004)	1274.54 (888.11, 1829.10)
Female	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	155	10 (10, 10)	12876 (9489, 17472)	1284.49 (946.73, 1742.74)
Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	155	10 (10, 10)	19468 (15496, 24459)	1946.81 (1549.59, 2445.85)
Female	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	519	10 (10, 10)	304934 (237911, 390840)	30389.88 (23713.90, 38945.28)
Female	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	519	10 (10, 10)	924524 (750510, 1138886)	92171.55 (74822.64, 113543.10)
Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	519	10 (10, 10)	1878895 (1586011, 2225864)	187761.05 (158494.70, 222431.47)
Female	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	153	10 (10, 10)	785331 (484933, 1271815)	78234.14 (48312.07, 126688.43)
Female	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	153	10 (10, 10)	2106655 (1490680, 2977161)	210665.51 (149068.03, 297716.12)
Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	153	10 (10, 10)	5236885 (3880756, 7066912)	523688.47 (388075.59, 706691.20)
Female	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	87	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Female	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Female	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)	10 (10, 10)	0.99 (0.97, 1.01)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Female	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	155	10 (10, 11)	136546 (89268, 208864)	13319.90 (8844.86, 20059.09)
Female	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	155	10 (10, 10)	396863 (289955, 543189)	39591.01 (28926.67, 54186.94)
Female	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	155	10 (10, 10)	748414 (540245, 1036794)	74841.37 (54024.52, 103679.41)

MOCK

Table 5f. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age, sex								
Age < 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	269	10 (10, 10)	17005 (13156, 21980)	1696.36 (1312.50, 2192.48)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	10 (10, 10)	16543 (13418, 20396)	1649.23 (1337.49, 2033.63)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	10 (10, 10)	32705 (27399, 39039)	3270.52 (2739.91, 3903.89)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	79	10 (10, 10)	27788 (17970, 42970)	2771.79 (1792.45, 4286.21)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	10 (10, 10)	21789 (14248, 33321)	2178.91 (1424.83, 3332.11)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	10 (10, 10)	56962 (39317, 82526)	5696.22 (3931.72, 8252.62)
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	52	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)	10 (10, 10)	0.99 (0.97, 1.01)
Age < 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	83	10 (10, 11)	10603 (6760, 16631)	1033.17 (669.94, 1593.35)
Age < 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	83	10 (10, 10)	10100 (6984, 14608)	1010.05 (698.40, 1460.75)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	83	10 (10, 10)	14961 (11369, 19689)	1496.11 (1136.86, 1968.90)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	269	10 (10, 10)	240348 (178375, 323851)	23976.19 (17797.28, 32300.31)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	269	10 (10, 10)	725439 (563976, 933126)	72323.27 (56225.78, 93029.48)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	269	10 (10, 10)	1494002 (1218429, 1831901)	149400.21 (121842.92, 183190.15)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	79	10 (10, 10)	582852 (324144, 1048040)	58138.58 (32334.21, 104536.20)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	79	10 (10, 10)	1557246 (1019727, 2378101)	155724.56 (101972.70, 237810.10)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	79	10 (10, 10)	4234642 (2930914, 6118296)	423464.24 (293091.36, 611829.57)
Age < 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	52	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)	10 (10, 10)	0.99 (0.97, 1.01)
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	83	10 (10, 11)	100999 (60463, 168711)	9841.83 (6007.63, 16123.08)
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	83	10 (10, 10)	293632 (201048, 428852)	29363.18 (20104.77, 42885.16)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	83	10 (10, 10)	571578 (384900, 848795)	57157.76 (38489.96, 84879.54)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	163	10 (10, 10)	20977 (14896, 29540)	2097.68 (1489.60, 2953.97)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 10)	18877 (13705, 26001)	1866.53 (1356.91, 2567.57)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)	29372 (24030, 35901)	2937.19 (2402.98, 3590.15)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	67	10 (10, 10)	41875 (27088, 64734)	4187.48 (2708.77, 6473.42)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	10 (10, 10)	30884 (20281, 47031)	3088.44 (2028.11, 4703.13)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	10 (10, 10)	63477 (47023, 85688)	6347.70 (4702.33, 8568.81)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	28	11 (9, 12)	10 (10, 10)	0.93 (0.81, 1.07)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	28	11 (9, 13)	10 (10, 10)	0.92 (0.78, 1.08)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	28	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	64	10 (10, 10)	8697 (5222, 14483)	869.66 (522.19, 1448.34)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	64	10 (10, 10)	9188 (5784, 14598)	918.85 (578.36, 1459.77)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	64	10 (10, 10)	11210 (7775, 16161)	1120.96 (777.52, 1616.12)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	163	10 (10, 10)	276033 (182277, 418013)	27603.26 (18227.67, 41801.29)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	163	10 (10, 10)	756600 (546757, 1046981)	74811.32 (54086.35, 103477.74)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	163	10 (10, 10)	1920202 (1472176, 2504576)	192020.23 (147217.61, 250457.60)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	67	10 (10, 10)	1079995 (633450, 1841326)	107999.49 (63345.04, 184132.65)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	67	10 (10, 10)	1977267 (1268954, 3080952)	197726.73 (126895.40, 308095.19)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	67	10 (10, 10)	4318054 (3077671, 6058343)	431805.36 (307767.09, 605834.32)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	28	11 (9, 12)	10 (10, 10)	0.93 (0.81, 1.07)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	28	11 (9, 13)	10 (10, 11)	0.94 (0.79, 1.11)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	28	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	64	10 (10, 10)	83366 (42296, 164315)	8336.56 (4229.57, 16431.52)
Age < 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	64	10 (10, 10)	236528 (146661, 381460)	23652.81 (14666.14, 38146.03)
Age < 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	64	10 (10, 10)	373064 (243212, 572245)	37306.38 (24321.16, 57224.48)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	232	10 (10, 10)	59503 (46453, 76219)	5916.13 (4616.71, 7581.30)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	10 (10, 10)	66467 (53933, 81913)	6600.68 (5356.98, 8133.11)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	10 (10, 10)	105989 (87935, 127749)	10521.42 (8738.17, 12668.58)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	54	10 (10, 11)	121492 (77083, 191487)	11942.84 (7662.16, 18615.06)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	10 (10, 10)	148457 (98119, 224620)	14845.72 (9811.94, 22461.95)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	10 (10, 10)	230231 (167261, 316907)	23023.06 (16726.06, 31690.75)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	48	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	48	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	48	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	51	10 (10, 10)	39245 (22100, 69691)	3924.48 (2209.96, 6969.15)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)	50082 (30542, 82125)	5008.22 (3054.16, 8212.50)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)	76189 (49115, 118188)	7618.89 (4911.45, 11818.80)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	232	10 (10, 10)	794988 (585435, 1079548)	79042.03 (58202.65, 107342.91)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	232	10 (10, 10)	2674328 (2152728, 3322311)	265580.56 (213995.04, 329601.25)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	232	10 (10, 10)	5149990 (4231902, 6267253)	511235.06 (419941.28, 622375.80)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	54	10 (10, 11)	3362752 (2054881, 5503045)	330562.39 (202713.86, 539043.05)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	54	10 (10, 10)	7426127 (5296972, 10411111)	742612.73 (529697.25, 1041111.05)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	54	10 (10, 10)	13502491 (11607977, 15706205)	1350249.15 (1160797.74, 1570620.53)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	48	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	48	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age \geq 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	48	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	51	10 (10, 10)	537607 (291471, 991596)	53760.68 (29147.06, 99159.60)
Age \geq 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)	2027539 (1259961, 3262731)	202753.90 (125996.11, 326273.11)
Age \geq 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)	3447429 (2322804, 5116559)	344742.86 (232280.42, 511655.88)
Age \geq 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	250	10 (10, 10)	59851 (47954, 74699)	5939.41 (4759.85, 7411.27)
Age \geq 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	10 (10, 10)	64209 (53151, 77567)	6401.45 (5299.06, 7733.16)
Age \geq 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	10 (10, 10)	117943 (99447, 139878)	11750.53 (9917.62, 13922.19)
Age \geq 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	74	10 (10, 10)	137448 (87797, 215179)	13617.44 (8720.37, 21264.54)
Age \geq 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	10 (10, 10)	166523 (121761, 227741)	16652.29 (12176.06, 22774.10)
Age \geq 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	10 (10, 10)	288235 (216852, 383115)	28823.47 (21685.20, 38311.49)
Age \geq 65 Female	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 \geq 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	35	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	35	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	72	10 (10, 10)	32440 (21159, 49736)	3179.25 (2072.58, 4876.82)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)	37051 (27449, 50013)	3657.70 (2719.73, 4919.14)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	61265 (47638, 78789)	6126.46 (4763.78, 7878.92)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	250	10 (10, 10)	875715 (670811, 1143209)	86902.97 (66586.59, 113418.14)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	250	10 (10, 10)	2708471 (2228982, 3291105)	270027.12 (222227.95, 328107.44)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	250	10 (10, 10)	5189777 (4355492, 6183867)	517053.81 (434090.43, 615873.16)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	74	10 (10, 10)	2781850 (1795669, 4309643)	275607.01 (178109.07, 426475.89)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	74	10 (10, 10)	7590360 (5921961, 9728799)	759036.03 (592196.09, 972879.93)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	74	10 (10, 10)	12894340 (10799304, 15395807)	1289433.98 (1079930.42, 1539580.67)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	35	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	35	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	35	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	72	10 (10, 10)	507512 (329028, 782814)	49738.19 (32306.17, 76576.34)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	72	10 (10, 10)	1473236 (1067157, 2033836)	145438.84 (105433.61, 200623.47)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	72	10 (10, 10)	2420004 (1820068, 3217693)	242000.40 (182006.75, 321769.35)

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Table 5g. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Hispanic or Latino ethnicity

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Hispanic or Latino ethnicity								
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	136	10 (10, 10)	22074 (14121, 34506)	2207.38 (1412.06, 3450.64)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	10 (10, 10)	22266 (15847, 31284)	2226.58 (1584.75, 3128.36)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	10 (10, 10)	41773 (31562, 55289)	4177.34 (3156.18, 5528.90)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	35	10 (10, 10)	66150 (37538, 116570)	6614.98 (3753.79, 11657.02)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	10 (10, 10)	57339 (30559, 107588)	5733.92 (3055.89, 10758.85)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	10 (10, 10)	90332 (50343, 162084)	9033.16 (5034.32, 16208.37)
Hispanic or Latino	D29 fold-rise over D1	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, 10)	1.00 (1.00, 1.00)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	20	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	38	10 (10, 10)	26345 (9909, 70041)	2607.33 (980.41, 6934.00)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	38	10 (10, 10)	34815 (16110, 75239)	3481.54 (1611.02, 7523.86)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	38	10 (10, 10)	26708 (12585, 56680)	2670.83 (1258.52, 5668.01)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	136	10 (10, 10)	332872 (193115, 573771)	33287.22 (19311.52, 57377.11)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	136	10 (10, 10)	1087406 (737091, 1604213)	108740.60 (73709.14, 160421.34)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	136	10 (10, 10)	2082654 (1564176, 2772993)	208265.41 (156417.59, 277299.26)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	35	10 (10, 10)	1420449 (558648, 3611715)	142044.90 (55864.75, 361171.46)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	35	10 (10, 10)	2735111 (1368395, 5466868)	273511.13 (136839.49, 546686.78)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	35	10 (10, 10)	7578287 (5040721, 11393296)	757828.67 (504072.13, 1139329.58)
Hispanic or Latino	D57 fold-rise over D1	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	Positive	Anti N IgG (IU/ml)	38	10 (10, 10)	452690 (158709, 1291220)	44802.56 (15709.89, 127771.11)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	38	10 (10, 10)	747435 (391924, 1425424)	74743.46 (39192.45, 142542.38)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	38	10 (10, 10)	1403460 (609038, 3234119)	140346.03 (60903.77, 323411.95)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	690	10 (10, 10)	23655 (19521, 28664)	2361.23 (1948.59, 2861.26)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	10 (10, 10)	23020 (19425, 27280)	2286.61 (1930.10, 2708.97)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	10 (10, 10)	39694 (35055, 44946)	3963.68 (3500.65, 4487.96)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	217	10 (10, 10)	41747 (30714, 56743)	4155.34 (3057.89, 5646.66)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	10 (10, 10)	35344 (26390, 47337)	3534.42 (2639.00, 4733.66)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	10 (10, 10)	83383 (65546, 106075)	8338.33 (6554.59, 10607.48)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	130	10 (10, 11)	10 (10, 10)	0.98 (0.94, 1.02)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	130	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	130	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	214	10 (10, 10)	12063 (8992, 16185)	1185.92 (892.08, 1576.54)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	214	10 (10, 10)	11608 (9046, 14896)	1158.76 (903.07, 1486.86)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	214	10 (10, 10)	18056 (14910, 21865)	1805.57 (1490.99, 2186.53)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	690	10 (10, 10)	334364 (266627, 419309)	33376.43 (26615.01, 41855.57)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	690	10 (10, 10)	987977 (822264, 1187086)	98137.11 (81690.28, 117895.20)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	690	10 (10, 10)	2063432 (1775937, 2397468)	206047.30 (177339.03, 239402.97)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	217	10 (10, 10)	968852 (654113, 1435033)	96436.92 (65115.44, 142824.48)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	217	10 (10, 10)	2315554 (1731123, 3097290)	231555.38 (173112.28, 309728.99)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	217	10 (10, 10)	5301268 (4150604, 6770929)	530126.82 (415060.39, 677092.90)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	130	10 (10, 11)	10 (10, 10)	0.98 (0.94, 1.02)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	130	10 (10, 10)	10 (10, 10)	1.01 (1.00, 1.02)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	130	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	214	10 (10, 10)	129424 (89788, 186557)	12723.27 (8908.87, 18170.84)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	214	10 (10, 10)	381696 (293138, 497006)	38101.89 (29262.14, 49612.02)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	214	10 (10, 10)	648311 (505732, 831086)	64831.06 (50573.21, 83108.56)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	88	10 (10, 10)	24172 (15240, 38338)	2390.80 (1508.53, 3789.06)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	10 (10, 10)	22876 (15904, 32905)	2274.83 (1582.12, 3270.83)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	10 (10, 10)	50488 (35885, 71034)	5048.79 (3588.47, 7103.37)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	22	10 (10, 10)	34292 (18107, 64943)	3429.17 (1810.69, 6494.31)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	10 (10, 10)	25827 (18334, 36382)	2582.70 (1833.44, 3638.16)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	10 (10, 10)	46903 (33825, 65038)	4690.32 (3382.48, 6503.83)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	13	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	13	12 (8, 18)	10 (10, 10)	0.82 (0.56, 1.21)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	18	10 (10, 10)	7067 (1907, 26192)	706.66 (190.66, 2619.21)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	18	10 (10, 10)	10750 (3611, 32001)	1075.02 (361.13, 3200.07)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	18	10 (10, 10)	11909 (5649, 25107)	1190.89 (564.87, 2510.66)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	88	10 (10, 10)	259797 (148513, 454466)	25696.00 (14717.82, 44862.93)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	88	10 (10, 10)	735710 (462524, 1170251)	73159.15 (46013.55, 116319.24)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	88	10 (10, 10)	2279592 (1446853, 3591615)	227959.19 (144685.30, 359161.52)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	22	10 (10, 10)	710026 (245263, 2055490)	71002.57 (24526.34, 205549.00)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	22	10 (10, 10)	1751283 (872333, 3515850)	175128.31 (87233.31, 351585.01)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	22	10 (10, 10)	3840709 (2197166, 6713669)	384070.92 (219716.64, 671366.86)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	13	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	13	12 (8, 18)	10 (10, 10)	0.82 (0.56, 1.21)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	18	10 (10, 10)	26411 (10028, 69563)	2641.13 (1002.77, 6956.29)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	18	10 (10, 10)	162620 (55659, 475135)	16262.02 (5565.86, 47513.49)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	18	10 (10, 10)	417076 (107739, 1614570)	41707.62 (10773.92, 161457.03)

MOCK

Table 5h. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Race

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Race								
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	362	10 (10, 10)	26952 (20883, 34784)	2692.55 (2086.26, 3475.03)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)	23438 (18669, 29425)	2343.79 (1866.88, 2942.53)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)	40376 (34349, 47460)	4031.72 (3430.05, 4738.93)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	125	10 (10, 10)	33909 (24023, 47863)	3381.77 (2396.63, 4771.84)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	30985 (21434, 44793)	3098.50 (2143.36, 4479.29)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	72481 (53061, 99008)	7248.12 (5306.15, 9900.82)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	67	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	0.99 (0.96, 1.01)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	121	10 (10, 10)	12594 (8382, 18924)	1256.17 (836.02, 1887.47)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	10931 (7560, 15804)	1089.81 (753.88, 1575.44)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	18868 (14808, 24043)	1886.83 (1480.76, 2404.27)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	362	10 (10, 10)	328428 (241933, 445846)	32810.77 (24169.70, 44541.16)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)	1035293 (809568, 1323956)	103529.30 (80956.76, 132395.58)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)	2145772 (1770774, 2600184)	214266.04 (176817.71, 259645.59)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	125	10 (10, 10)	855574 (517613, 1414198)	85327.48 (51627.40, 141025.47)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	1943813 (1349835, 2799166)	194381.34 (134983.46, 279916.55)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	4608987 (3338577, 6362819)	460898.73 (333857.72, 636281.94)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	67	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.03)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	0.99 (0.96, 1.01)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	121	10 (10, 10)	105260 (65764, 168478)	10498.69 (6559.92, 16802.41)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	393045 (287516, 537306)	39187.22 (28666.35, 53569.39)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	674526 (485396, 937351)	67452.65 (48539.56, 93735.08)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	195	10 (10, 10)	16417 (11437, 23568)	1634.81 (1138.84, 2346.77)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	10 (10, 11)	18966 (14305, 25146)	1843.84 (1399.25, 2429.70)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	10 (10, 10)	33478 (26923, 41629)	3347.79 (2692.25, 4162.95)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	52	10 (10, 10)	70405 (39637, 125057)	6985.30 (3937.62, 12391.85)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)	49806 (32279, 76849)	4980.58 (3227.90, 7684.92)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)	92510 (63827, 134083)	9251.02 (6382.72, 13408.29)
Black or African American	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Black or African American	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Black or African American	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Black or African American	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	60	10 (10, 10)	9803 (5446, 17644)	975.15 (541.69, 1755.46)
Black or African American	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)	13142 (8909, 19387)	1314.25 (890.92, 1938.73)
Black or African American	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)	17281 (11001, 27148)	1728.13 (1100.06, 2714.79)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	195	10 (10, 10)	270892 (186938, 392550)	26974.76 (18614.75, 39089.32)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	195	10 (10, 11)	700976 (482795, 1017755)	68147.28 (47075.98, 98650.13)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	195	10 (10, 10)	1698222 (1265203, 2279444)	169822.23 (126520.28, 227944.40)
Black or African American	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	52	10 (10, 10)	1211651 (545292, 2692316)	120214.66 (54113.01, 267062.68)
Black or African American	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	52	10 (10, 10)	3863173 (2496394, 5978266)	386317.31 (249639.38, 597826.60)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Black or African American	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	52	10 (10, 10)	5233980 (3292870, 8319352)	523397.96 (329286.96, 831935.23)
Black or African American	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Black or African American	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Black or African American	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	39	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Black or African American	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	60	10 (10, 10)	162243 (80633, 326450)	16139.73 (8020.79, 32476.93)
Black or African American	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)	304404 (168043, 551417)	30440.40 (16804.30, 55141.74)
Black or African American	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)	604842 (358324, 1020956)	60484.17 (35832.44, 102095.63)
Asian	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	67	10 (10, 10)	30141 (17403, 52204)	2996.97 (1730.61, 5189.99)
Asian	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)	33349 (22259, 49964)	3334.89 (2225.89, 4996.41)
Asian	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)	63758 (45931, 88504)	6375.81 (4593.12, 8850.40)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Asian	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	24	10 (10, 11)	33316 (16935, 65545)	3259.82 (1663.18, 6389.20)
Asian	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	24	10 (10, 10)	24553 (12536, 48091)	2455.34 (1253.59, 4809.13)
Asian	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	24	10 (10, 10)	49522 (26709, 91821)	4952.19 (2670.86, 9182.14)
Asian	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	12	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Asian	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	12	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Asian	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	12	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Asian	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	13	10 (10, 10)	17273 (6186, 48234)	1727.30 (618.56, 4823.36)
Asian	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	13	10 (10, 10)	27396 (5431, 138186)	2739.55 (543.12, 13818.59)
Asian	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	13	10 (10, 10)	12500 (4740, 32962)	1250.02 (474.04, 3296.21)
Asian	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	67	10 (10, 10)	759619 (426880, 1351718)	75529.70 (42469.21, 134326.40)
Asian	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)	1685637 (1167594, 2433528)	168563.68 (116759.36, 243352.76)
Asian	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)	2633046 (1864450, 3718486)	263304.56 (186444.95, 371848.60)
Asian	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	24	10 (10, 11)	639026 (148027, 2758648)	62525.33 (14515.66, 269324.12)
Asian	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	24	10 (10, 10)	2094481 (742718, 5906481)	209448.13 (74271.83, 590648.10)
Asian	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	24	10 (10, 10)	4848443 (2478358, 9485072)	484844.34 (247835.80, 948507.20)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Asian	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	12	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)	12	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)	12	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Asian	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	13	10 (10, 10)	275834 (26204, 2903499)	27583.39 (2620.44, 290349.91)
Asian	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	13	10 (10, 10)	750472 (176753, 3186420)	75047.23 (17675.28, 318642.03)
Asian	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	13	10 (10, 10)	859200 (168867, 4371633)	85919.98 (16886.69, 437163.32)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	13	10 (10, 10)	45133 (16515, 123343)	4513.35 (1651.52, 12334.31)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	10 (10, 10)	42283 (20288, 88120)	4228.26 (2028.84, 8812.00)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)	30785 (13439, 70516)	3078.46 (1343.94, 7051.60)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	6	10 (10, 10)	42543 (10105, 179112)	4254.32 (1010.50, 17911.17)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	10 (10, 10)	22761 (8134, 63689)	2276.11 (813.43, 6368.93)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	10 (10, 10)	85898 (68138, 108288)	8589.81 (6813.79, 10828.76)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	5	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	5	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	5	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	4	10 (10, 10)	3080 (1115, 8510)	307.99 (111.47, 851.02)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	4	10 (10, 10)	7559 (3837, 14892)	755.89 (383.69, 1489.16)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	4	10 (10, 10)	5348 (1735, 16488)	534.82 (173.48, 1648.79)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	13	10 (10, 10)	982833 (235813, 4096296)	98283.35 (23581.35, 409629.55)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	13	10 (10, 10)	836025 (283249, 2467576)	83602.47 (28324.85, 246757.62)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	13	10 (10, 10)	4760602 (2359191, 9606399)	476060.17 (235919.09, 960639.89)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	6	10 (10, 10)	2398314 (427206, 13464021)	239831.36 (42720.58, 1346402.09)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	6	10 (10, 10)	2320038 (501453, 10733961)	232003.84 (50145.31, 1073396.08)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	6	10 (10, 10)	7507181 (3379449, 16676615)	750718.10 (337944.88, 1667661.53)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	5	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	5	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	5	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	4	10 (10, 10)	36102 (4722, 276037)	3610.19 (472.16, 27603.67)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	4	10 (10, 10)	272152 (65917, 1123631)	27215.15 (6591.71, 112363.10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	4	10 (10, 10)	677711 (214540, 2140827)	67771.11 (21453.97, 214082.67)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	17	10 (10, 10)	114600 (47108, 278791)	11460.05 (4710.80, 27879.06)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	17	11 (9, 14)	114776 (53301, 247155)	10095.55 (4569.91, 22302.43)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	17	10 (10, 10)	116196 (67714, 199391)	11619.59 (6771.36, 19939.11)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	5	10 (10, 10)	55095 (9965, 304612)	5509.47 (996.49, 30461.20)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)	44998 (2885, 701952)	4499.84 (288.46, 70195.19)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)	107953 (71167, 163752)	10795.26 (7116.74, 16375.16)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	1	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	1	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	1	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	1	10 (10, 10)	734 (734, 734)	73.38 (73.38, 73.38)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	1	10 (10, 10)	6237 (6237, 6237)	623.73 (623.73, 623.73)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	1	10 (10, 10)	10844 (10844, 10844)	1084.43 (1084.43, 1084.43)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	17	10 (10, 10)	2236794 (700142, 7146051)	223679.40 (70014.16, 714605.11)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml) Anti Spike IgG (IU/ml)	17	11 (9, 14)	5533419 (2490433, 12294540)	486710.15 (203427.87, 1164475.48)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	17	10 (10, 10)	7662810 (3323463, 17667914)	766281.01 (332346.29, 1766791.43)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)	513962 (93920, 2812583)	51396.21 (9391.97, 281258.27)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)	1828480 (947016, 3530396)	182848.03 (94701.55, 353039.63)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	1	10 (10, 10)	5139344 (595014, 44390337)	513934.43 (59501.37, 4439033.72)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	1	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	1	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	1	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	1	10 (10, 10)	969 (969, 969)	96.94 (96.94, 96.94)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	1	10 (10, 10)	4780 (4780, 4780)	477.97 (477.97, 477.97)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	1	10 (10, 10)	61376 (61376, 61376)	6137.62 (6137.62, 6137.62)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	52	10 (10, 10)	20542 (10447, 40388)	2054.15 (1044.75, 4038.82)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)	21505 (13701, 33755)	2150.54 (1370.10, 3375.53)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)	45067 (27165, 74765)	4506.67 (2716.51, 7476.53)
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	12	10 (10, 10)	70589 (26321, 189314)	7058.93 (2632.06, 18931.39)
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	10 (10, 10)	55196 (16260, 187371)	5519.61 (1625.98, 18737.06)
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	10 (10, 10)	155885 (67996, 357377)	15588.50 (6799.58, 35737.70)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Multiracial	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	8	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Multiracial	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	8	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Multiracial	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	8	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	19	10 (10, 10)	15871 (7677, 32809)	1587.06 (767.70, 3280.89)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	19	10 (10, 10)	24792 (13458, 45670)	2479.22 (1345.85, 4567.01)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	19	10 (10, 10)	25261 (11298, 56479)	2526.08 (1129.81, 5647.92)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	52	10 (10, 10)	214922 (107912, 428046)	21492.16 (10791.19, 42804.62)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	52	10 (10, 10)	1262157 (710446, 2242309)	126215.68 (71044.61, 224230.92)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	52	10 (10, 10)	2195866 (1476648, 3265387)	219586.59 (147664.79, 326538.73)
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	12	10 (10, 10)	1276135 (551639, 2952150)	127613.54 (55163.92, 295214.95)
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	12	10 (10, 10)	3777504 (1786314, 7988255)	377750.36 (178631.43, 798825.46)
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	12	10 (10, 10)	8118223 (3167974, 20803689)	811822.28 (316797.37, 2080368.91)
Multiracial	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	8	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Multiracial	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	8	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Multiracial	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	8	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Multiracial	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	19	10 (10, 10)	235861 (101669, 547174)	23586.11 (10166.87, 54717.37)
Multiracial	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	19	10 (10, 10)	693982 (285837, 1684912)	69398.16 (28583.71, 168491.21)
Multiracial	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	19	10 (10, 10)	791515 (327732, 1911609)	79151.46 (32773.19, 191160.91)
Other	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	34	10 (10, 10)	21653 (9122, 51401)	2165.33 (912.17, 5140.10)
Other	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	10 (10, 10)	22295 (11570, 42963)	2229.51 (1156.96, 4296.34)
Other	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	10 (10, 10)	38007 (21259, 67950)	3800.73 (2125.91, 6794.99)
Other	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	7	10 (10, 10)	18596 (5457, 63367)	1859.60 (545.72, 6336.73)
Other	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	10 (10, 10)	18039 (7489, 43449)	1803.88 (748.91, 4344.93)
Other	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	10 (10, 10)	75844 (32129, 179037)	7584.42 (3212.93, 17903.73)
Other	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	4	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	4	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	4	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	5	10 (10, 10)	44670 (548, 3638655)	4466.95 (54.84, 363865.54)
Other	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)	49870 (993, 2505753)	4987.05 (99.25, 250575.29)
Other	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)	40496 (1871, 876366)	4049.58 (187.13, 87636.61)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Other	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	34	10 (10, 10)	460615 (152205, 1393948)	46061.47 (15220.51, 139394.78)
Other	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	34	10 (10, 10)	959325 (467189, 1969877)	95932.51 (46718.88, 196987.75)
Other	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	34	10 (10, 10)	2238776 (1221484, 4103302)	223877.62 (122148.43, 410330.20)
Other	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	7	10 (10, 10)	506707 (112863, 2274911)	50670.72 (11286.25, 227491.09)
Other	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	7	10 (10, 10)	4612046 (1663462, 12787169)	461204.60 (166346.19, 1278716.85)
Other	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	7	10 (10, 10)	5745695 (3340937, 9881364)	574569.52 (334093.70, 988136.36)
Other	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	4	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	4	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	4	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	5	10 (10, 10)	635834 (21972, 18400096)	63583.42 (2197.19, 1840009.60)
Other	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	5	10 (10, 10)	390164 (12362, 12313729)	39016.41 (1236.25, 1231372.90)
Other	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	5	10 (10, 10)	1950467 (62864, 60516607)	195046.73 (6286.41, 6051660.72)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	87	10 (10, 10)	19313 (11899, 31347)	1931.33 (1189.92, 3134.71)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)	19972 (12070, 33047)	1984.44 (1199.39, 3283.33)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)	41499 (27382, 62895)	4133.86 (2728.77, 6262.46)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	20	10 (10, 10)	67460 (18205, 249984)	6745.99 (1820.46, 24998.37)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	10 (10, 10)	57668 (23639, 140684)	5766.80 (2363.88, 14068.40)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	10 (10, 10)	112437 (52711, 239834)	11243.65 (5271.13, 23983.41)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	14	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	14	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	14	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	24	11 (9, 14)	15732 (6215, 39822)	1415.94 (642.37, 3121.07)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	24	10 (10, 10)	11890 (6465, 21867)	1188.99 (646.49, 2186.73)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	24	10 (10, 10)	17779 (10512, 30069)	1777.89 (1051.21, 3006.90)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	87	10 (10, 10)	313760 (169470, 580901)	31376.01 (16947.01, 58090.14)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	87	10 (10, 10)	958206 (602856, 1523015)	95207.62 (59917.16, 151283.72)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	87	10 (10, 10)	1898203 (1201387, 2999181)	189087.45 (119691.94, 298717.41)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	20	10 (10, 10)	1890562 (655546, 5452282)	189056.18 (65554.64, 545228.19)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	20	10 (10, 10)	3239260 (1199389, 8748461)	323926.04 (119938.90, 874846.13)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	20	10 (10, 10)	9280577 (5784309, 14890128)	928057.68 (578430.93, 1489012.80)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	14	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	14	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	14	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	24	11 (9, 14)	212439 (58037, 777613)	19119.79 (5831.21, 62691.28)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	24	10 (10, 10)	401782 (153583, 1051084)	40178.22 (15358.33, 105108.37)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	24	10 (10, 10)	645039 (295340, 1408800)	64503.88 (29533.99, 140880.03)

Table 5i. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Underrepresented minority status								
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	420	10 (10, 10)	21539 (16824, 27575)	2147.71 (1677.60, 2749.55)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	10 (10, 10)	23355 (19242, 28347)	2298.01 (1896.26, 2784.86)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	10 (10, 10)	40216 (34320, 47124)	4021.60 (3432.03, 4712.44)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	120	10 (10, 10)	59825 (42571, 84073)	5939.85 (4228.47, 8343.87)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	10 (10, 10)	44605 (32113, 61955)	4460.46 (3211.32, 6195.47)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	10 (10, 10)	90964 (70627, 117156)	9096.36 (7062.72, 11715.57)
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	73	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	73	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	73	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	111	10 (10, 10)	12076 (7763, 18784)	1203.77 (773.81, 1872.63)
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	111	10 (10, 10)	17596 (12331, 25109)	1759.61 (1233.11, 2510.90)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	111	10 (10, 10)	18884 (13334, 26743)	1888.39 (1333.43, 2674.32)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	420	10 (10, 10)	358864 (270757, 475643)	35783.11 (26998.45, 47426.08)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	420	10 (10, 10)	977894 (775549, 1233031)	96220.17 (76347.07, 121266.24)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	420	10 (10, 10)	2083276 (1732503, 2505069)	208327.61 (173250.30, 250506.88)
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	120	10 (10, 10)	1149410 (702292, 1881190)	114120.94 (69745.73, 186729.57)
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	10 (10, 10)	3146770 (2273084, 4356267)	314676.99 (227308.38, 435626.74)
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	10 (10, 10)	5991417 (4527248, 7929117)	599141.71 (452724.79, 792911.71)
Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	73	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	73	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	73	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	111	10 (10, 10)	193321 (112530, 332117)	19271.20 (11217.36, 33107.55)
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	111	10 (10, 10)	397884 (256621, 616908)	39788.42 (25662.15, 61690.79)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	111	10 (10, 10)	734879 (489927, 1102301)	73487.92 (48992.72, 110230.12)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	362	10 (10, 10)	26952 (20883, 34784)	2692.55 (2086.26, 3475.03)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)	23438 (18669, 29425)	2343.79 (1866.88, 2942.53)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)	40376 (34349, 47460)	4031.72 (3430.05, 4738.93)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	125	10 (10, 10)	33909 (24023, 47863)	3381.77 (2396.63, 4771.84)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	30985 (21434, 44793)	3098.50 (2143.36, 4479.29)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	72481 (53061, 99008)	7248.12 (5306.15, 9900.82)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	67	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	0.99 (0.96, 1.01)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	121	10 (10, 10)	12594 (8382, 18924)	1256.17 (836.02, 1887.47)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	10931 (7560, 15804)	1089.81 (753.88, 1575.44)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	18868 (14808, 24043)	1886.83 (1480.76, 2404.27)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	362	10 (10, 10)	328428 (241933, 445846)	32810.77 (24169.70, 44541.16)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	362	10 (10, 10)	1035293 (809568, 1323956)	103529.30 (80956.76, 132395.58)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	362	10 (10, 10)	2145772 (1770774, 2600184)	214266.04 (176817.71, 259645.59)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	125	10 (10, 10)	855574 (517613, 1414198)	85327.48 (51627.40, 141025.47)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	125	10 (10, 10)	1943813 (1349835, 2799166)	194381.34 (134983.46, 279916.55)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	125	10 (10, 10)	4608987 (3338577, 6362819)	460898.73 (333857.72, 636281.94)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	67	10 (10, 11)	10 (10, 10)	0.97 (0.91, 1.03)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.03)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	67	10 (10, 10)	10 (10, 10)	0.99 (0.96, 1.01)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	121	10 (10, 10)	105260 (65764, 168478)	10498.69 (6559.92, 16802.41)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	121	10 (10, 10)	393045 (287516, 537306)	39187.22 (28666.35, 53569.39)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	121	10 (10, 10)	674526 (485396, 937351)	67452.65 (48539.56, 93735.08)

MOCK

Table 5j. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Underrepresented minority status

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age, Underrepresented minority status								
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	192	10 (10, 10)	16236 (11950, 22060)	1623.60 (1194.98, 2205.96)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	10 (10, 10)	17593 (13852, 22344)	1725.89 (1361.64, 2187.59)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	10 (10, 10)	30531 (25113, 37119)	3053.10 (2511.25, 3711.87)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	69	10 (10, 10)	50828 (33992, 76001)	5058.85 (3383.17, 7564.49)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	10 (10, 10)	34937 (23612, 51692)	3493.66 (2361.25, 5169.16)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	10 (10, 10)	70998 (52424, 96153)	7099.81 (5242.39, 9615.33)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	37	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	37	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	37	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	61	10 (10, 10)	9484 (5617, 16014)	948.43 (561.72, 1601.39)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)	13618 (8923, 20783)	1361.81 (892.33, 2078.29)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)	13717 (9065, 20756)	1371.71 (906.53, 2075.61)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	192	10 (10, 10)	292558 (206172, 415140)	29255.76 (20617.15, 41513.96)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	192	10 (10, 10)	741900 (555661, 990562)	72781.13 (54544.47, 97115.13)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	192	10 (10, 10)	1629402 (1297120, 2046806)	162940.23 (129711.97, 204680.56)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	69	10 (10, 10)	930919 (513604, 1687309)	92654.09 (51125.98, 167914.24)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	69	10 (10, 10)	2542683 (1712040, 3776334)	254268.26 (171204.01, 377633.36)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	69	10 (10, 10)	5081700 (3610831, 7151727)	508170.01 (361083.05, 715172.74)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	37	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	37	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	37	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	61	10 (10, 10)	145989 (76394, 278984)	14598.87 (7639.41, 27898.36)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)	277278 (163947, 468952)	27727.83 (16394.70, 46895.20)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)	543679 (333997, 884998)	54367.88 (33399.71, 88499.76)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	175	10 (10, 10)	22546 (16449, 30904)	2254.62 (1644.88, 3090.40)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	10 (10, 10)	18239 (13758, 24181)	1823.94 (1375.79, 2418.07)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	10 (10, 10)	31442 (25791, 38330)	3144.18 (2579.11, 3833.04)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml) Anti RBD IgG (IU/ml)	59	10 (10, 10)	22816 (14927, 34875)	2281.61 (1492.66, 3487.54)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	10 (10, 10)	19045 (11981, 30275)	1904.54 (1198.08, 3027.54)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	59	10 (10, 10)	50450 (34089, 74664)	5044.99 (3408.87, 7466.38)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	31	10 (10, 11)	10 (10, 10)	0.96 (0.88, 1.04)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	31	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	31	10 (10, 10)	10 (10, 10)	0.98 (0.95, 1.02)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	61	10 (10, 10)	9218 (5562, 15276)	921.79 (556.25, 1527.56)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)	7844 (4943, 12447)	784.36 (494.26, 1244.74)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)	13337 (9897, 17972)	1333.71 (989.74, 1797.23)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	175	10 (10, 10)	264562 (181376, 385898)	26456.16 (18137.64, 38589.80)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	175	10 (10, 10)	821667 (605817, 1114423)	82166.69 (60581.70, 111442.32)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	175	10 (10, 10)	1724310 (1360533, 2185355)	172431.05 (136053.26, 218535.49)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	59	10 (10, 10)	596002 (316557, 1122130)	59600.20 (31655.74, 112212.97)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	10 (10, 10)	1330657 (839177, 2109982)	133065.71 (83917.71, 210998.18)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	10 (10, 10)	3419951 (2265916, 5161739)	341995.14 (226591.60, 516173.95)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	31	10 (10, 11)	10 (10, 10)	0.96 (0.88, 1.04)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	31	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.03)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	31	10 (10, 10)	10 (10, 10)	0.98 (0.95, 1.02)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	61	10 (10, 10)	69600 (38639, 125369)	6959.96 (3863.88, 12536.92)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	10 (10, 10)	264698 (179593, 390131)	26469.79 (17959.33, 39013.14)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	10 (10, 10)	451492 (299075, 681584)	45149.17 (29907.49, 68158.43)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	228	10 (10, 10)	62158 (49075, 78729)	6131.29 (4841.75, 7764.28)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	10 (10, 10)	67566 (54928, 83111)	6723.29 (5465.75, 8270.15)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	10 (10, 10)	113000 (94968, 134457)	11300.05 (9496.80, 13445.69)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	51	10 (10, 11)	120781 (72698, 200668)	11866.15 (7200.38, 19555.30)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)	127850 (82403, 198362)	12784.98 (8240.28, 19836.18)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)	264698 (193965, 361225)	26469.82 (19396.51, 36122.55)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	36	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	50	10 (10, 11)	36935 (21250, 64196)	3628.46 (2082.95, 6320.71)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	50	10 (10, 10)	57615 (37847, 87707)	5761.48 (3784.71, 8770.72)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	50	10 (10, 10)	82913 (55530, 123801)	8291.33 (5552.97, 12380.06)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	228	10 (10, 10)	771969 (594098, 1003095)	76147.19 (58640.43, 98880.49)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	228	10 (10, 10)	2754587 (2268630, 3344640)	274100.63 (225748.76, 332808.72)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	228	10 (10, 10)	5234940 (4335352, 6321193)	523493.98 (433535.17, 632119.29)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	51	10 (10, 11)	2851970 (1691139, 4809619)	280191.41 (166781.09, 470720.20)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	51	10 (10, 10)	7886529 (5982602, 10396367)	788652.86 (598260.24, 1039636.74)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	51	10 (10, 10)	12184499 (9858697, 15058989)	1218449.89 (985869.74, 1505898.89)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	36	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	36	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	50	10 (10, 11)	709142 (413162, 1217155)	69666.09 (40572.33, 119622.51)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	50	10 (10, 10)	2116643 (1388474, 3226693)	211664.33 (138847.41, 322669.26)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	50	10 (10, 10)	2964324 (2089369, 4205680)	296432.41 (208936.91, 420567.97)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	187	10 (10, 10)	52931 (40926, 68456)	5268.42 (4072.81, 6815.00)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	10 (10, 10)	60501 (48781, 75037)	6050.09 (4878.07, 7503.69)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	10 (10, 10)	103956 (85919, 125780)	10323.75 (8540.15, 12479.85)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	66	10 (10, 10)	136437 (87480, 212792)	13478.95 (8689.60, 20908.00)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	10 (10, 10)	171330 (122104, 240402)	17133.00 (12210.38, 24040.16)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	10 (10, 10)	258922 (193660, 346179)	25892.24 (19365.96, 34617.87)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	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)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	36	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	60	10 (10, 10)	37306 (22911, 60744)	3687.38 (2264.32, 6004.81)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)	34684 (23682, 50795)	3422.26 (2343.82, 4996.92)
Age ≥ 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)	63090 (45886, 86746)	6309.04 (4588.59, 8674.56)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	187	10 (10, 10)	744013 (543887, 1017778)	74055.02 (54135.35, 101304.35)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	187	10 (10, 10)	2480906 (1963293, 3134986)	248090.62 (196329.26, 313498.63)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	187	10 (10, 10)	4905828 (4009921, 6001900)	487190.64 (398077.65, 596252.31)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	66	10 (10, 10)	3047576 (1943331, 4779276)	301077.79 (192430.18, 471068.71)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	66	10 (10, 10)	7361735 (5495760, 9861264)	736173.49 (549575.99, 986126.43)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	66	10 (10, 10)	13150407 (11178796, 15469753)	1315040.71 (1117879.58, 1546975.29)
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	Positive	Anti N IgG (IU/ml)	60	10 (10, 10)	443960 (270210, 729435)	43882.05 (26757.87, 71965.14)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	60	10 (10, 10)	1555275 (1070146, 2260326)	153460.09 (105621.81, 222965.32)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	60	10 (10, 10)	2726537 (1931325, 3849174)	272653.70 (193132.47, 384917.37)

Table 6. The ratios of GMTs/GMCs between groups

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 vs Age < 65	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (1.00, 1.01)
Age \geq 65 vs Age < 65	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.01)
Age \geq 65 vs Age < 65	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (1.00, 1.01)
Age \geq 65 vs Age < 65	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.03)
Age \geq 65 vs Age < 65	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 vs Age < 65	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 vs Age < 65	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.98 (0.94, 1.02)
Age \geq 65 vs Age < 65	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.98 (0.93, 1.02)
Age \geq 65 vs Age < 65	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Age \geq 65 vs Age < 65	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.96, 1.03)
Age \geq 65 vs Age < 65	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.02)
Age \geq 65 vs Age < 65	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 vs Age < 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	59687 (50609, 70395)	18416 (15002, 22607)	3.24 (2.49, 4.22)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	65260 (56734, 75068)	17393 (14565, 20770)	3.75 (2.99, 4.70)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	112166 (98902, 127209)	31397 (27475, 35879)	3.57 (2.97, 4.29)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	130450 (94702, 179694)	32567 (23744, 44670)	4.01 (2.55, 6.28)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	158619 (123545, 203649)	24939 (18393, 33814)	6.36 (4.29, 9.43)
Age \geq 65 vs Age < 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	262073 (211994, 323982)	59400 (46119, 76506)	4.41 (3.17, 6.14)
Age \geq 65 vs Age < 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 vs Age < 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 vs Age < 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 vs Age < 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	35028 (24879, 49317)	9820 (7012, 13753)	3.57 (2.21, 5.77)
Age \geq 65 vs Age < 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	41836 (32047, 54614)	9737 (7318, 12957)	4.30 (2.91, 6.35)
Age \geq 65 vs Age < 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	66891 (53117, 84238)	13380 (10752, 16650)	5.00 (3.64, 6.87)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 vs Age < 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	836805 (684275, 1023335)	253319 (198848, 322710)	3.30 (2.41, 4.53)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	2692372 (2329146, 3112243)	737116 (604473, 898866)	3.65 (2.86, 4.67)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	5171042 (4536102, 5894857)	1643373 (1397160, 1932976)	3.15 (2.55, 3.88)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	3014476 (2173987, 4179907)	739998 (487226, 1123907)	4.07 (2.40, 6.92)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	7520373 (6146909, 9200723)	1708031 (1250384, 2333179)	4.40 (3.04, 6.38)
Age \geq 65 vs Age < 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	13148461 (11661345, 14825221)	4266733 (3292306, 5529560)	3.08 (2.32, 4.10)
Age \geq 65 vs Age < 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 vs Age < 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Age \geq 65 vs Age < 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 vs Age < 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	519433 (364323, 740581)	93772 (62211, 141344)	5.54 (3.22, 9.53)
Age \geq 65 vs Age < 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	1675605 (1276999, 2198632)	270061 (201183, 362521)	6.20 (4.16, 9.26)
Age \geq 65 vs Age < 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	2790960 (2209589, 3525298)	484596 (361146, 650244)	5.76 (3.96, 8.38)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (1.00, 1.01)
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.01)
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.01)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.01)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.98 (0.93, 1.02)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.97 (0.92, 1.03)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 11)	10 (10, 10)	1.02 (0.98, 1.06)
At-risk vs Not at-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.99 (0.95, 1.02)
At-risk vs Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.02)
At-risk vs Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	23746 (19934, 28287)	23464 (18827, 29244)	1.01 (0.76, 1.34)
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	26276 (22610, 30535)	21736 (17965, 26298)	1.21 (0.95, 1.55)
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	45842 (40067, 52448)	39200 (34023, 45165)	1.17 (0.96, 1.43)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	55180 (40419, 75332)	39449 (28242, 55103)	1.40 (0.88, 2.23)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	55528 (43641, 70653)	31130 (22510, 43050)	1.78 (1.17, 2.72)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	103862 (82479, 130788)	73051 (55946, 95386)	1.42 (0.99, 2.05)
At-risk vs Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	16553 (12215, 22429)	11438 (8001, 16352)	1.45 (0.90, 2.33)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	16713 (12642, 22096)	11818 (8756, 15950)	1.41 (0.93, 2.16)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	26705 (21285, 33505)	16070 (12770, 20222)	1.66 (1.18, 2.33)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	335374 (270080, 416453)	321219 (247884, 416250)	1.04 (0.74, 1.47)
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	1142597 (961925, 1357205)	904842 (732112, 1118324)	1.26 (0.96, 1.66)
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2144439 (1840509, 2498559)	2066294 (1739231, 2454861)	1.04 (0.82, 1.31)
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	1327591 (937265, 1880469)	882754 (567083, 1374143)	1.50 (0.85, 2.66)
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	2930270 (2216035, 3874704)	2113273 (1525010, 2928453)	1.39 (0.89, 2.15)
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	6396516 (5214355, 7846688)	5023873 (3827375, 6594416)	1.27 (0.90, 1.80)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.04)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	197242 (138403, 281094)	113637 (73666, 175296)	1.74 (0.98, 3.07)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	663561 (492320, 894363)	320294 (235413, 435781)	2.07 (1.33, 3.22)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	1012116 (794913, 1288669)	594413 (435730, 810886)	1.70 (1.13, 2.56)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.02)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.98, 1.01)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.02)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.97 (0.92, 1.03)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.97 (0.91, 1.03)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 11)	10 (10, 10)	1.03 (0.97, 1.10)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.98 (0.94, 1.02)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	15066 (11800, 19236)	19467 (15117, 25069)	0.77 (0.54, 1.10)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	16530 (13368, 20441)	17639 (14174, 21953)	0.94 (0.69, 1.27)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	31028 (25725, 37423)	31500 (26782, 37050)	0.98 (0.77, 1.26)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	35719 (23749, 53721)	31746 (21553, 46760)	1.13 (0.64, 1.97)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	30603 (22501, 41623)	23567 (16129, 34434)	1.30 (0.80, 2.12)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	62641 (46271, 84801)	58534 (42846, 79967)	1.07 (0.69, 1.65)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	11526 (8014, 16577)	9421 (6230, 14246)	1.22 (0.71, 2.12)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	10221 (7219, 14470)	9616 (6788, 13622)	1.06 (0.65, 1.74)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	16112 (12299, 21107)	12751 (9770, 16642)	1.26 (0.86, 1.85)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	227691 (168852, 307033)	260904 (193707, 351412)	0.87 (0.57, 1.33)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	761200 (595277, 973370)	730590 (572430, 932450)	1.04 (0.74, 1.47)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	1498825 (1211392, 1854460)	1685764 (1382036, 2056240)	0.89 (0.66, 1.19)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	848831 (532838, 1352218)	712451 (424544, 1195605)	1.19 (0.59, 2.39)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	1815884 (1228679, 2683724)	1679359 (1144789, 2463552)	1.08 (0.63, 1.87)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	4547755 (3405518, 6073108)	4192147 (3040678, 5779665)	1.08 (0.70, 1.67)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 11)	10 (10, 10)	1.02 (0.98, 1.07)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	115913 (72906, 184288)	88760 (53701, 146707)	1.31 (0.66, 2.59)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	417627 (286526, 608715)	241209 (168681, 344922)	1.73 (1.03, 2.91)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	575539 (423609, 781958)	463469 (322830, 665378)	1.24 (0.77, 1.99)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.98, 1.01)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.02)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (1.00, 1.03)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.98 (0.95, 1.01)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.97, 1.04)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 11)	10 (10, 10)	1.02 (0.98, 1.06)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	48363 (38230, 61183)	75305 (60091, 94371)	0.64 (0.46, 0.89)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	54232 (44615, 65922)	80069 (65707, 97571)	0.68 (0.51, 0.89)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	84391 (70325, 101269)	153593 (130667, 180543)	0.55 (0.43, 0.70)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	134756 (86047, 211040)	127407 (81244, 199800)	1.06 (0.56, 1.99)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	188670 (129392, 275106)	139826 (99996, 195520)	1.35 (0.82, 2.23)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	293282 (210942, 407763)	241494 (182978, 318724)	1.21 (0.79, 1.86)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	36017 (20724, 62595)	34367 (22390, 52751)	1.05 (0.52, 2.11)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	48060 (30237, 76388)	38048 (27669, 52321)	1.26 (0.72, 2.22)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	79058 (52125, 119908)	59664 (45819, 77691)	1.33 (0.81, 2.17)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	614449 (455495, 828875)	1177109 (909148, 1524048)	0.52 (0.35, 0.77)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	2156196 (1736284, 2677662)	3441017 (2860842, 4138850)	0.63 (0.47, 0.83)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	3754377 (3053564, 4616033)	7365218 (6408010, 8465410)	0.51 (0.40, 0.65)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	3325369 (2089439, 5292368)	2806906 (1779671, 4427066)	1.18 (0.62, 2.26)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	7826271 (5853680, 10463591)	7305563 (5522547, 9664247)	1.07 (0.72, 1.60)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	12884976 (10641883, 15600868)	13343347 (11421210, 15588971)	0.97 (0.76, 1.23)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	617829 (374065, 1020446)	461295 (282331, 753702)	1.34 (0.66, 2.70)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	1793880 (1112795, 2891824)	1599200 (1156266, 2211811)	1.12 (0.63, 1.99)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	3402410 (2325361, 4978321)	2437171 (1815977, 3270859)	1.40 (0.87, 2.25)
Male vs Female	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.00)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Male vs Female	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.02)
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	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.01)
Male vs Female	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 11)	10 (10, 10)	1.05 (0.96, 1.14)
Male vs Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	11 (9, 12)	10 (10, 10)	1.05 (0.95, 1.17)
Male vs Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.97, 1.01)
Male vs Female	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.98 (0.94, 1.02)
Male vs Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.00)
Male vs Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Male vs Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	27118 (20803, 35351)	21438 (17319, 26535)	1.26 (0.90, 1.78)
Male vs Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	25738 (20110, 32941)	21234 (17837, 25278)	1.21 (0.89, 1.65)
Male vs Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	40290 (34397, 47193)	41415 (35725, 48012)	0.97 (0.78, 1.22)
Male vs Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	52664 (36905, 75154)	37697 (26222, 54193)	1.40 (0.84, 2.33)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Male vs Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	43301 (30763, 60949)	32117 (22658, 45526)	1.35 (0.81, 2.24)
Male vs Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	83762 (65541, 107048)	77611 (57216, 105276)	1.08 (0.72, 1.62)
Male vs Female	Day 29	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 (1.00, 1.00)
Male vs Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Male vs Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	11707 (7655, 17903)	13066 (8983, 19004)	0.90 (0.51, 1.58)
Male vs Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	12838 (8743, 18852)	12876 (9489, 17472)	1.00 (0.60, 1.65)
Male vs Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	16359 (12044, 22219)	19468 (15496, 24459)	0.84 (0.56, 1.26)
Male vs Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	358185 (259645, 494122)	304934 (237911, 390840)	1.17 (0.78, 1.77)
Male vs Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	1032572 (803692, 1326633)	924524 (750510, 1138886)	1.12 (0.80, 1.56)
Male vs Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2448348 (1992531, 3008439)	1878895 (1586011, 2225864)	1.30 (0.99, 1.71)
Male vs Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	1379076 (895389, 2124049)	785331 (484933, 1271815)	1.76 (0.92, 3.34)
Male vs Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	2628794 (1842173, 3751308)	2106655 (1490680, 2977161)	1.25 (0.76, 2.06)
Male vs Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5518909 (4222583, 7213204)	5236885 (3880756, 7066912)	1.05 (0.70, 1.59)
Male vs Female	Day 57	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 SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Male vs Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.01 (0.99, 1.03)
Male vs Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Male vs Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	120405 (68919, 210356)	136546 (89268, 208864)	0.88 (0.43, 1.79)
Male vs Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	361345 (243436, 536364)	396863 (289955, 543189)	0.91 (0.54, 1.55)
Male vs Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	578439 (406742, 822616)	748414 (540245, 1036794)	0.77 (0.47, 1.28)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.99, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.00)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.98 (0.94, 1.02)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.01)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.96, 1.03)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	22074 (14121, 34506)	23655 (19521, 28664)	0.93 (0.57, 1.52)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	22266 (15847, 31284)	23020 (19425, 27280)	0.97 (0.66, 1.42)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	41773 (31562, 55289)	39694 (35055, 44946)	1.05 (0.77, 1.44)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	66150 (37538, 116570)	41747 (30714, 56743)	1.58 (0.84, 2.98)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	57339 (30559, 107588)	35344 (26390, 47337)	1.62 (0.82, 3.20)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	90332 (50343, 162084)	83383 (65546, 106075)	1.08 (0.58, 2.02)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	26345 (9909, 70041)	12063 (8992, 16185)	2.18 (0.81, 5.85)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	34815 (16110, 75239)	11608 (9046, 14896)	3.00 (1.35, 6.66)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	26708 (12585, 56680)	18056 (14910, 21865)	1.48 (0.70, 3.14)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	332872 (193115, 573771)	334364 (266627, 419309)	1.00 (0.55, 1.79)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	1087406 (737091, 1604213)	987977 (822264, 1187086)	1.10 (0.71, 1.70)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2082654 (1564176, 2772993)	2063432 (1775937, 2397468)	1.01 (0.73, 1.40)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	1420449 (558648, 3611715)	968852 (654113, 1435033)	1.47 (0.54, 3.95)

The diagram illustrates the relationship between three markers: Anti RBD IgG, Anti Spike IgG, and Anti N IgG. It shows arrows indicating the conversion from one marker to another. Specifically, there are arrows pointing from Anti RBD IgG to Anti Spike IgG, from Anti Spike IgG to Anti N IgG, and from Anti N IgG back to Anti RBD IgG, forming a cycle. This visualizes the interconnectedness of these immunological responses across the different groups and time points.

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	2735111 (1368395, 5466868)	2315554 (1731123, 3097290)	1.18 (0.56, 2.47)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	7578287 (5040721, 11393296)	5301268 (4150604, 6770929)	1.43 (0.90, 2.28)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.98, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	452690 (158709, 1291220)	129424 (89788, 186557)	3.50 (1.19, 10.30)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	747435 (391924, 1425424)	381696 (293138, 497006)	1.96 (0.99, 3.89)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	1403460 (609038, 3234119)	648311 (505732, 831086)	2.16 (0.93, 5.02)
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, 1.01)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.02 (1.00, 1.04)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.02)
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)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 11)	0.97 (0.91, 1.03)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	0.99 (0.96, 1.01)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.01)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (0.99, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	21539 (16824, 27575)	26952 (20883, 34784)	0.80 (0.56, 1.14)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	23355 (19242, 28347)	23438 (18669, 29425)	1.00 (0.74, 1.34)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	40216 (34320, 47124)	40376 (34349, 47460)	1.00 (0.79, 1.25)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	59825 (42571, 84073)	33909 (24023, 47863)	1.76 (1.09, 2.86)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	44605 (32113, 61955)	30985 (21434, 44793)	1.44 (0.88, 2.36)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	90964 (70627, 117156)	72481 (53061, 99008)	1.25 (0.84, 1.88)
Communities of Color vs White Non-Hispanic	Day 29	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)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	12076 (7763, 18784)	12594 (8382, 18924)	0.96 (0.53, 1.75)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	17596 (12331, 25109)	10931 (7560, 15804)	1.61 (0.96, 2.69)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	18884 (13334, 26743)	18868 (14808, 24043)	1.00 (0.65, 1.53)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	358864 (270757, 475643)	328428 (241933, 445846)	1.09 (0.72, 1.66)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	977894 (775549, 1233031)	1035293 (809568, 1323956)	0.94 (0.67, 1.32)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	2083276 (1732503, 2505069)	2145772 (1770774, 2600184)	0.97 (0.74, 1.27)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	1149410 (702292, 1881190)	855574 (517613, 1414198)	1.34 (0.66, 2.72)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	3146770 (2273084, 4356267)	1943813 (1349835, 2799166)	1.62 (0.99, 2.64)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5991417 (4527248, 7929117)	4608987 (3338577, 6362819)	1.30 (0.85, 1.99)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 57	Placebo	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)	0.99 (0.98, 1.01)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	10 (10, 10)	10 (10, 10)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	193321 (112530, 332117)	105260 (65764, 168478)	1.84 (0.90, 3.76)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	397884 (256621, 616908)	393045 (287516, 537306)	1.01 (0.59, 1.73)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	734879 (489927, 1102301)	674526 (485396, 937351)	1.09 (0.65, 1.84)

Table 7a. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by All participants

Group	Visit	Baseline SARS-CoV-2	Marker	Comparison	Responder	% 2-Fold Rise	% 4-Fold Rise
Day 29	Negative		Anti N IgG (IU/ml)	Vaccine vs Placebo	100% (100%, 100%)	100% (100%, 100%)	99.8% (98.6%, 100%)
	Negative		Anti RBD IgG (IU/ml)	Vaccine vs Placebo	100% (100%, 100%)	100% (100%, 100%)	100% (100%, 100%)
	Negative		Anti Spike IgG (IU/ml)	Vaccine vs Placebo	100% (100%, 100%)	100% (100%, 100%)	100% (100%, 100%)
	Positive		Anti N IgG (IU/ml)	Vaccine vs Placebo	0% (0%, 0%)	0% (0%, 0%)	0% (0%, 0%)
	Positive		Anti RBD IgG (IU/ml)	Vaccine vs Placebo	0% (0%, 0%)	0% (0%, 0%)	0% (0%, 0%)
	Positive		Anti Spike IgG (IU/ml)	Vaccine vs Placebo	0% (0%, 0%)	0% (0%, 0%)	0% (0%, 0%)
	Negative		Anti N IgG (IU/ml)	Vaccine vs Placebo	100% (100%, 100%)	100% (100%, 100%)	100% (100%, 100%)
	Negative		Anti RBD IgG (IU/ml)	Vaccine vs Placebo	99.4% (96%, 99.9%)	99.4% (96%, 99.9%)	100% (100%, 100%)
	Negative		Anti Spike IgG (IU/ml)	Vaccine vs Placebo	100% (100%, 100%)	100% (100%, 100%)	100% (100%, 100%)
	Positive		Anti N IgG (IU/ml)	Vaccine vs Placebo	0% (0%, 0%)	0% (0%, 0%)	0% (0%, 0%)
	Positive		Anti RBD IgG (IU/ml)	Vaccine vs Placebo	0% (0%, 0%)	0% (0%, 0%)	0% (0%, 0%)
	Positive		Anti Spike IgG (IU/ml)	Vaccine vs Placebo	0% (0%, 0%)	0% (0%, 0%)	0% (0%, 0%)

Table 8. Antibody levels in the baseline SARS-CoV-2 negative per-protocol cohort (vaccine vs. placebo)

Visit	Marker	Baseline SARS-CoV-2 Negative							
		Vaccine				Placebo			
		N	Resp rate	GMT/GMC	N	Resp rate	GMT/GMC	Resp Rate Difference	GMTR/GMCR
Day 29	Anti N IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	23543 (19945, 27790)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	2354.30 (1994.51, 2778.99)
Day 29	Anti RBD IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	22926 (19863, 26460)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	2292.58 (1986.35, 2646.03)
Day 29	Anti Spike IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	40963 (36741, 45671)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	4096.31 (3674.06, 4567.08)
Day 57	Anti N IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	325136 (267241, 395574)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	32513.59 (26724.06, 39557.36)
Day 57	Anti RBD IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	966160 (823437, 1133621)	163	76.3/13359 = 0.6% (0.1%, 4.0%)	10 (10, 10)	99.4% (96%, 99.9%)	96216.76 (81986.55, 112916.89)
Day 57	Anti Spike IgG (IU/ml)	914	13295/13295 = 100.0% (100.0%, 100.0%)	2087965 (1831068, 2380904)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	208796.50 (183106.81, 238090.43)

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

Visit	Marker	Baseline SARS-CoV-2 Positive						Comparison	
		Vaccine			Placebo				
N	Resp rate	GMT/GMC	N	Resp rate	GMT/GMC	Resp Rate Difference	GMTR/GMCR		
Day 29	Anti N IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	43010 (33140, 55819)	270	1357/1357 = 100.0% (100.0%, 100.0%)	12518 (9458, 16567)	0% (0%, 0%)	3.44 (2.34, 5.04)
Day 29	Anti RBD IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	36133 (28182, 46328)	270	1357/1357 = 100.0% (100.0%, 100.0%)	12861 (10150, 16296)	0% (0%, 0%)	2.81 (1.99, 3.96)
Day 29	Anti Spike IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	79981 (65041, 98352)	270	1357/1357 = 100.0% (100.0%, 100.0%)	18191 (15159, 21829)	0% (0%, 0%)	4.40 (3.34, 5.79)
Day 57	Anti N IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	980579 (697583, 1378379)	270	1357/1357 = 100.0% (100.0%, 100.0%)	130008 (92643, 182444)	0% (0%, 0%)	7.54 (4.67, 12.19)
Day 57	Anti RBD IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	2298869 (1785648, 2959596)	270	1357/1357 = 100.0% (100.0%, 100.0%)	382614 (299829, 488256)	0% (0%, 0%)	6.01 (4.23, 8.54)
Day 57	Anti Spike IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	5346334 (4339333, 6587023)	270	1357/1357 = 100.0% (100.0%, 100.0%)	676872 (531354, 862241)	0% (0%, 0%)	7.90 (5.74, 10.87)

Table 10. Antibody levels in the per-protocol cohort (vaccine recipients)

Visit	Marker	Vaccine Recipients							
		Baseline SARS-CoV-2 Positive				Baseline SARS-CoV-2 Negative			Comparison
		N	Resp rate	GMT/GMC	N	Resp rate	GMT/GMC	Resp Rate Difference	GMTR/GMCR
Day 29	Anti N IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	43010 (33140, 55819)	914	13295/13295 = 100.0% (100.0%, 100.0%)	23543 (19945, 27790)	0% (0%, 0%)	1.83 (1.34, 2.49)
Day 29	Anti RBD IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	36133 (28182, 46328)	914	13295/13295 = 100.0% (100.0%, 100.0%)	22926 (19863, 26460)	0% (0%, 0%)	1.58 (1.18, 2.10)
Day 29	Anti Spike IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	79981 (65041, 98352)	914	13295/13295 = 100.0% (100.0%, 100.0%)	40963 (36741, 45671)	0% (0%, 0%)	1.95 (1.55, 2.47)
Day 57	Anti N IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	980579 (697583, 1378379)	914	13295/13295 = 100.0% (100.0%, 100.0%)	325136 (267241, 395574)	0% (0%, 0%)	3.02 (2.04, 4.47)
Day 57	Anti RBD IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	2298869 (1785648, 2959596)	914	13295/13295 = 100.0% (100.0%, 100.0%)	966160 (823437, 1133621)	0% (0%, 0%)	2.38 (1.76, 3.21)
Day 57	Anti Spike IgG (IU/ml)	274	1432/1432 = 100.0% (100.0%, 100.0%)	5346334 (4339333, 6587023)	914	13295/13295 = 100.0% (100.0%, 100.0%)	2087965 (1831068, 2380904)	0% (0%, 0%)	2.56 (2.00, 3.28)

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

Visit	Marker	Placebo Recipients							
		Baseline SARS-CoV-2 Positive			Baseline SARS-CoV-2 Negative			Comparison	
N	Resp rate	GMT/GMC	N	Resp rate	GMT/GMC	Resp Rate Difference	GMTR/GMCR		
Day 29	Anti N IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	12518 (9458, 16567)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	1251.77 (945.80, 1656.72)
Day 29	Anti RBD IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	12861 (10150, 16296)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	1286.10 (1015.03, 1629.57)
Day 29	Anti Spike IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	18191 (15159, 21829)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	1819.07 (1515.87, 2182.92)
Day 57	Anti N IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	130008 (92643, 182444)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	13000.84 (9264.31, 18244.40)
Day 57	Anti RBD IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	382614 (299829, 488256)	163	76.3/13359 = 0.6% (0.1%, 4.0%)	10 (10, 10)	99.4% (96%, 99.9%)	38103.25 (29854.93, 48630.43)
Day 57	Anti Spike IgG (IU/ml)	270	1357/1357 = 100.0% (100.0%, 100.0%)	676872 (531354, 862241)	163	0/13359 = 0.0% (0.0%, 0.0%)	10 (10, 10)	100% (100%, 100%)	67687.19 (53135.41, 86224.15)

MOCK

Chapter 2

Graphical Description of Immunogenicity Data

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

2.1.1 Baseline SARS-CoV-2 Negative

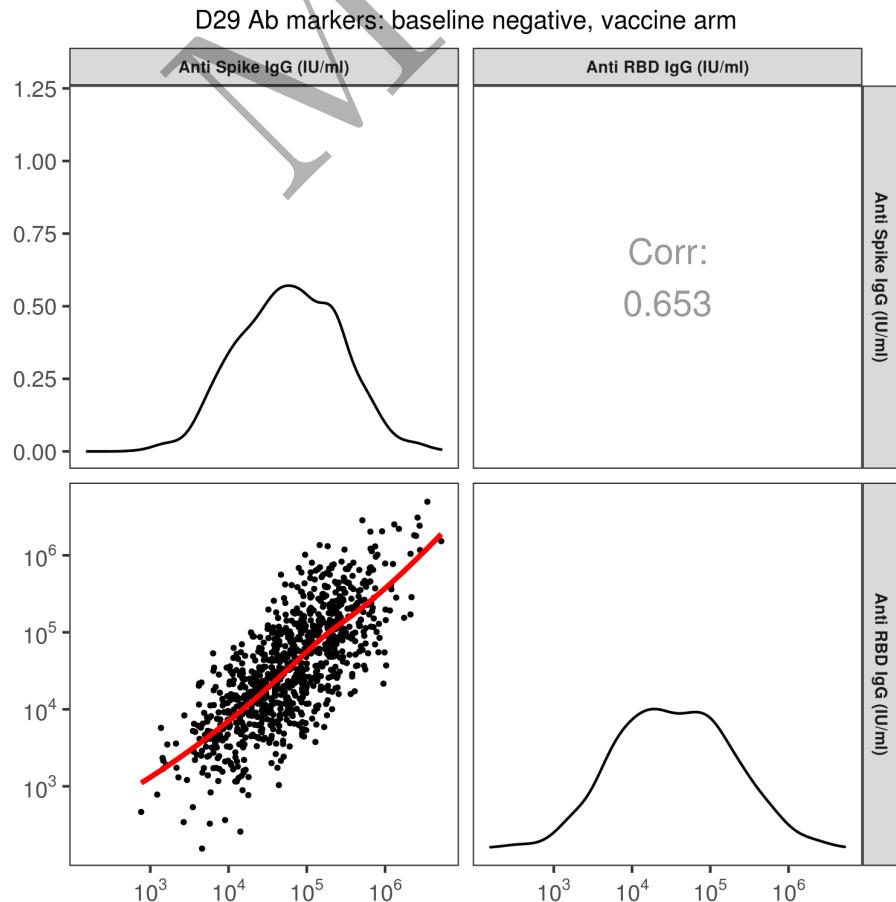


Figure 2.1: Pair plots of D29 Ab markers: baseline negative vaccine arm

D57 Ab markers: baseline negative, vaccine arm

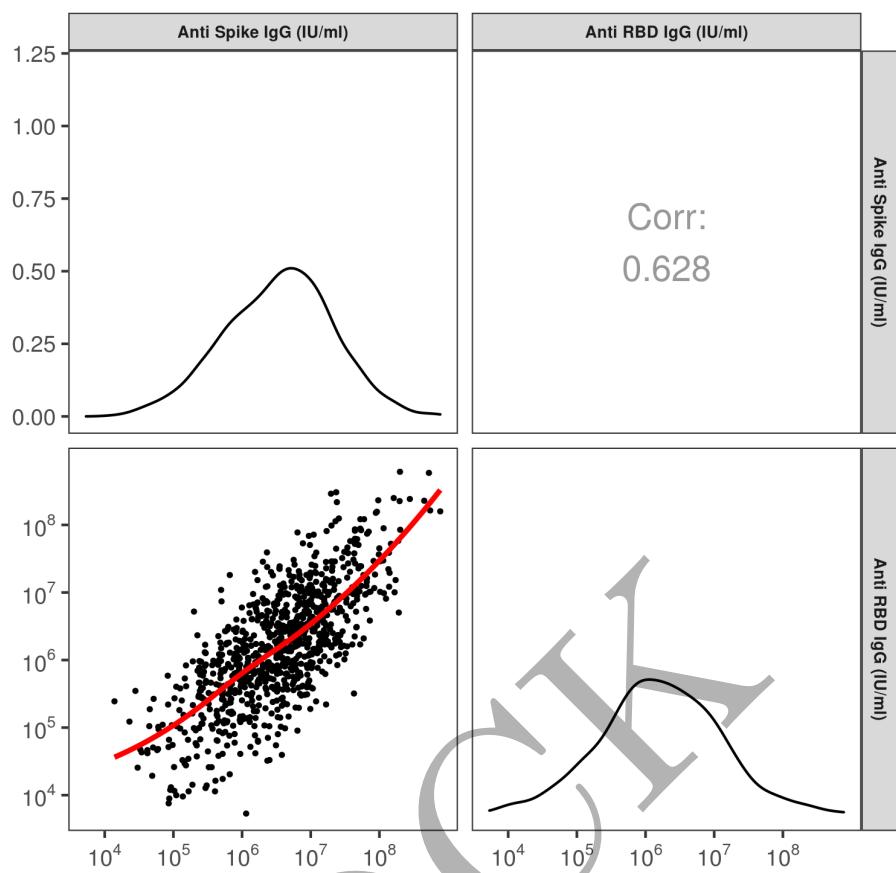


Figure 2.2: Pair plots of D57 Ab markers: baseline negative vaccine arm

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

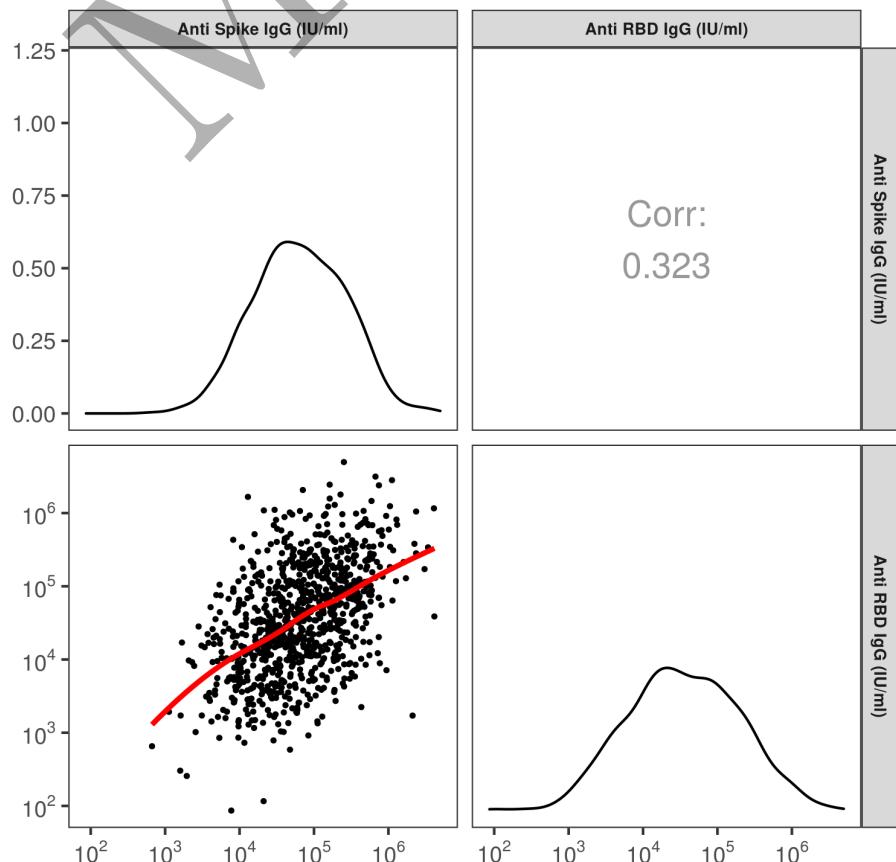


Figure 2.3: Pair plots of D29 fold-rise over D1 Ab markers: baseline negative vaccine arm

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

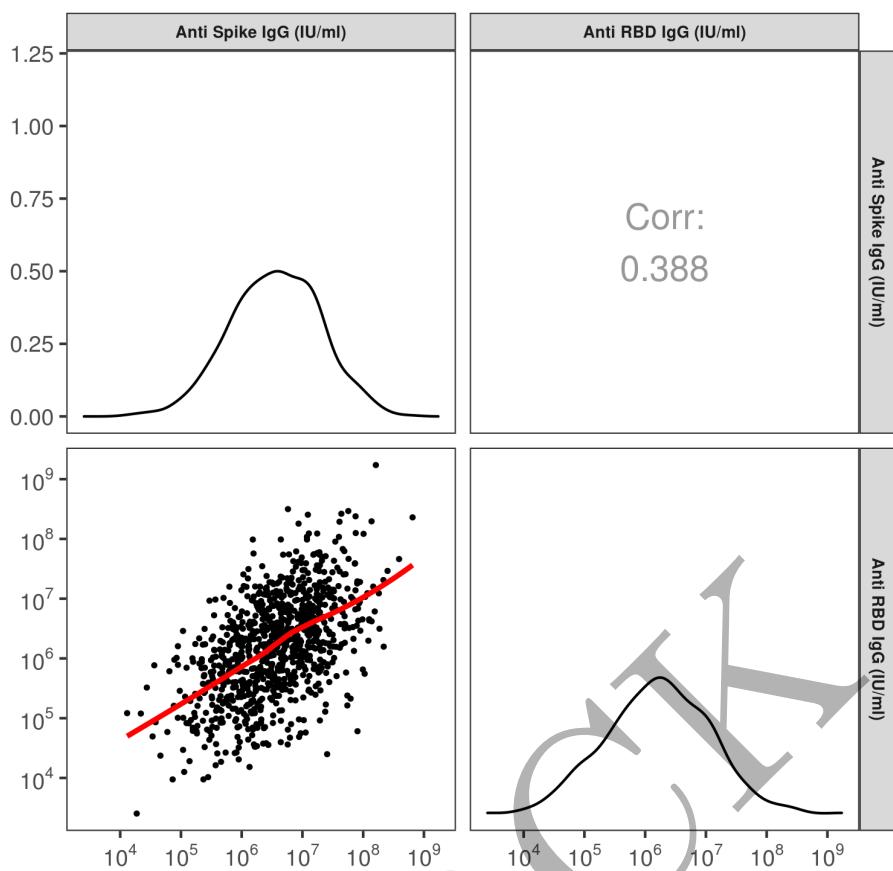


Figure 2.4: Pair plots of D57 fold-rise over D1 Ab markers: baseline negative vaccine arm

Binding Antibody to Spike: baseline negative vaccine arm

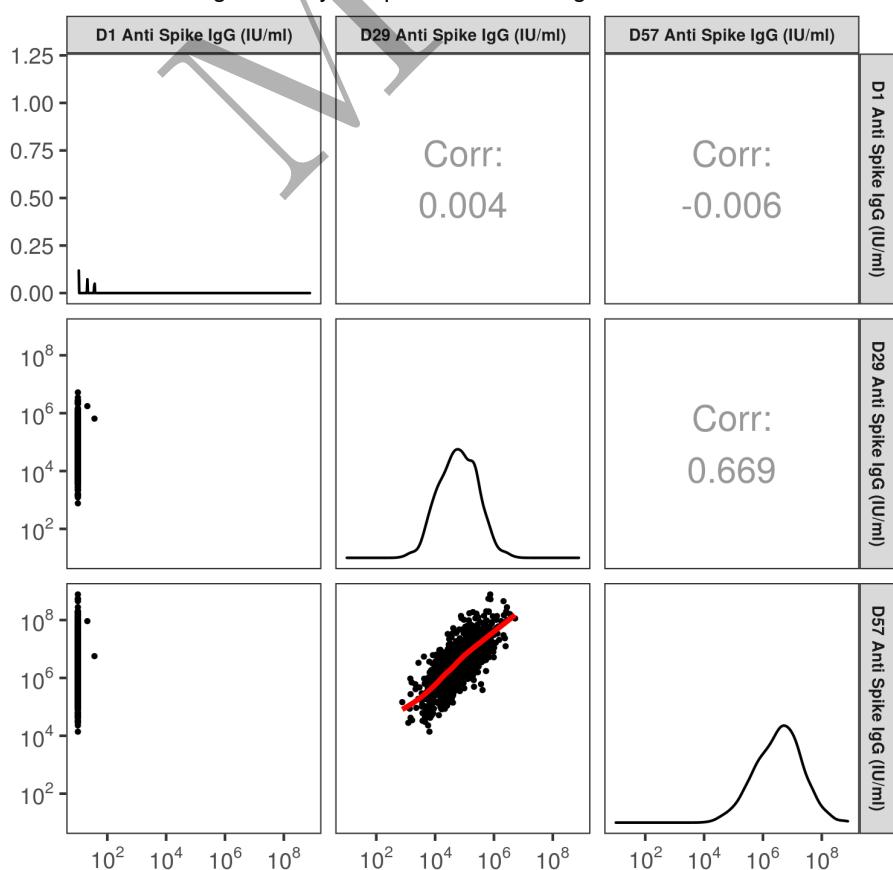


Figure 2.5: Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline negative vaccine arm

Binding Antibody to RBD: baseline negative vaccine arm

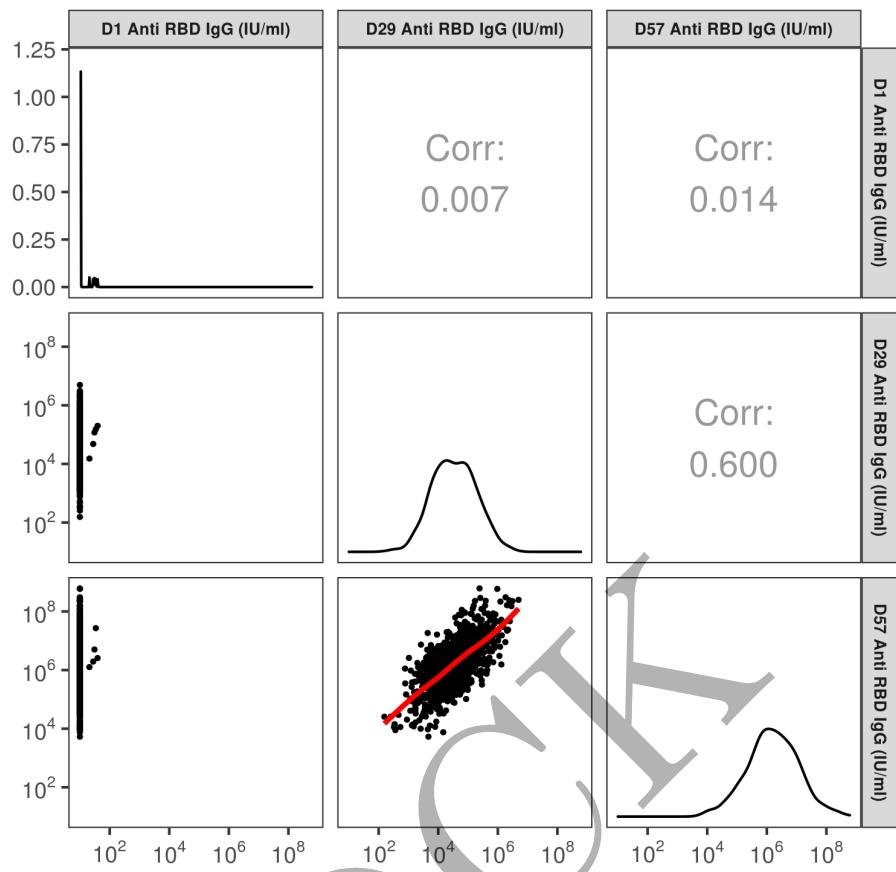


Figure 2.6: Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative vaccine arm

2.1.2 Baseline SARS-CoV-2 Positive

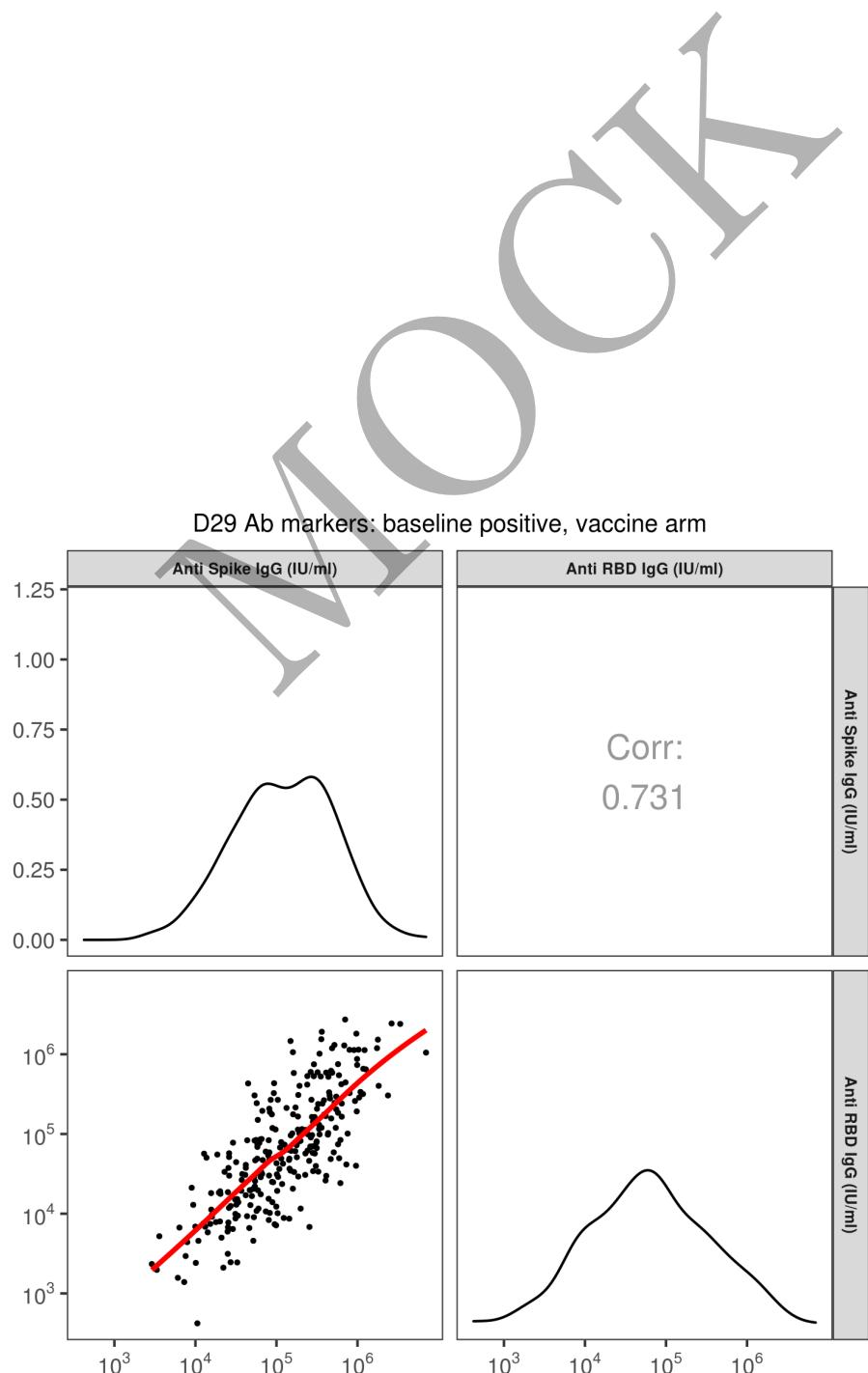


Figure 2.7: Pair plots of D29 Ab markers: baseline negative vaccine arm

D57 Ab markers: baseline positive, vaccine arm

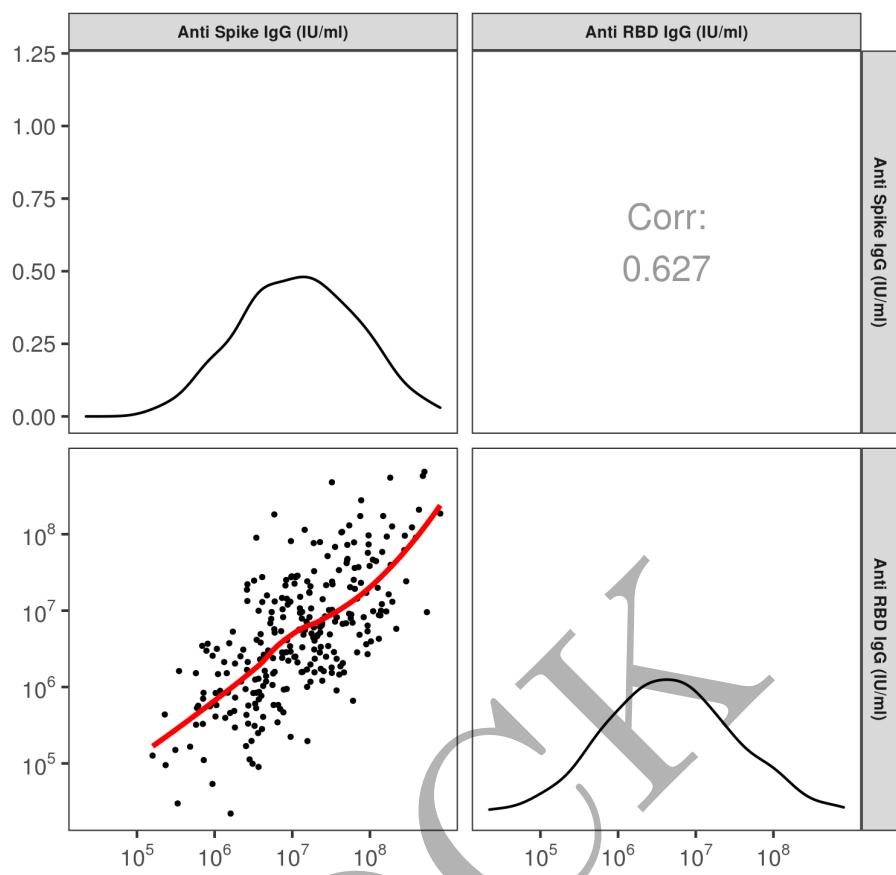


Figure 2.8: Pair plots of D57 Ab markers: baseline negative vaccine arm

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

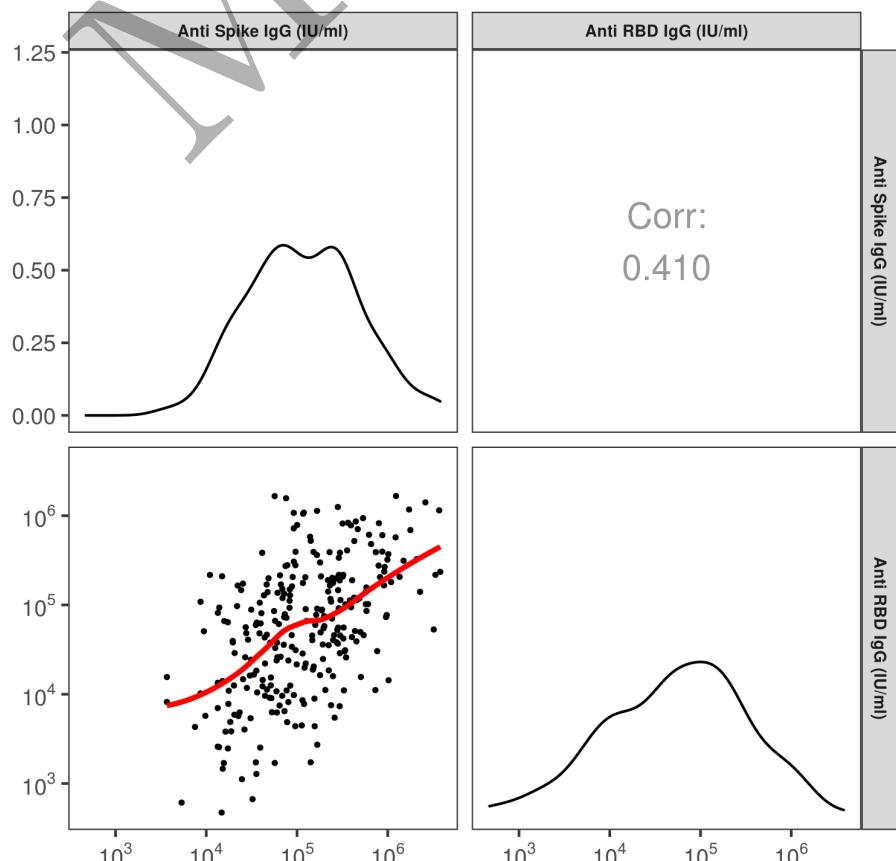


Figure 2.9: Pair plots of D29 fold-rise over D1 Ab markers: baseline negative vaccine arm

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

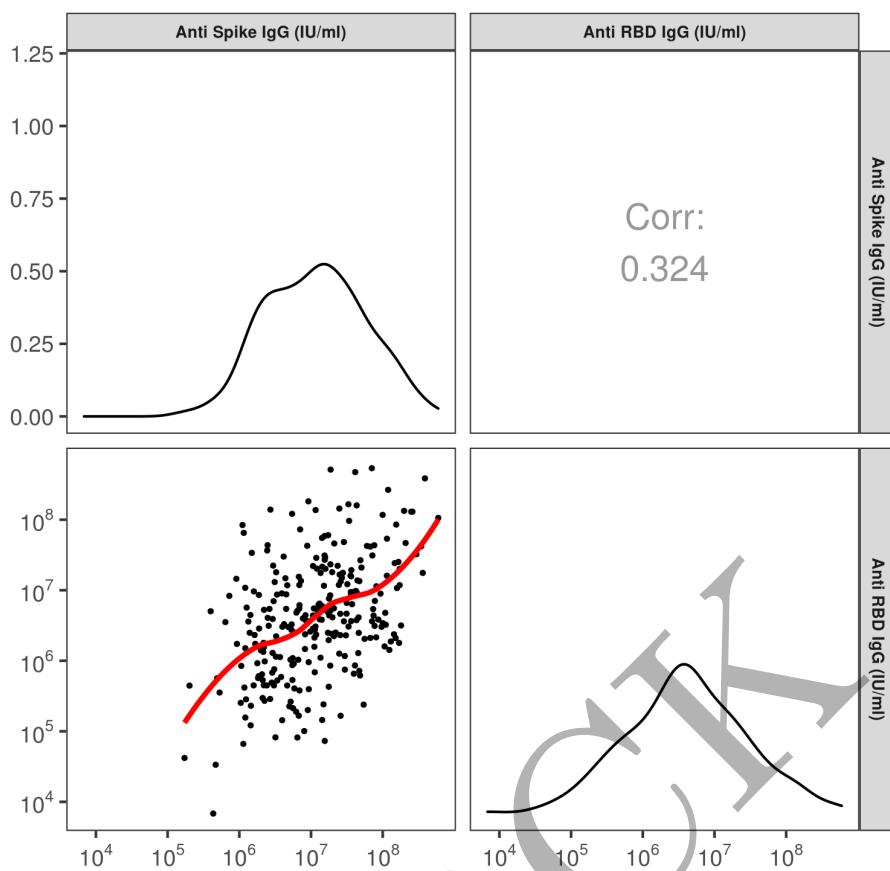


Figure 2.10: Pair plots of D57 fold-rise over D1 Ab markers: baseline negative vaccine arm

Binding Antibody to Spike: baseline positive vaccine arm

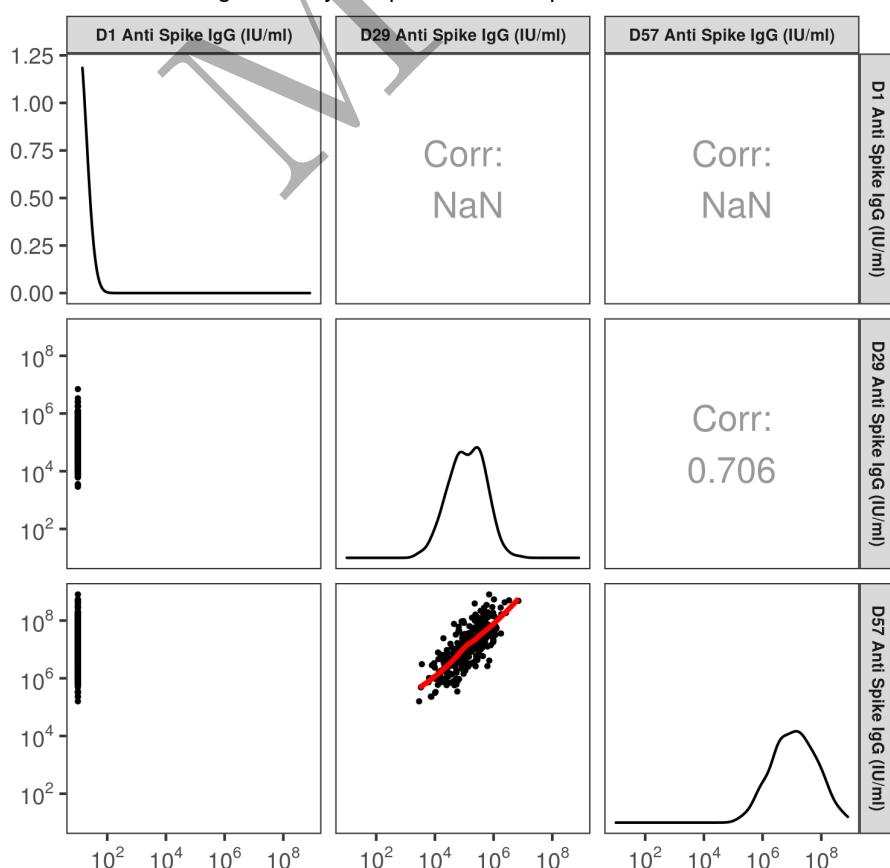


Figure 2.11: Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline negative vaccine arm

Binding Antibody to RBD: baseline positive vaccine arm

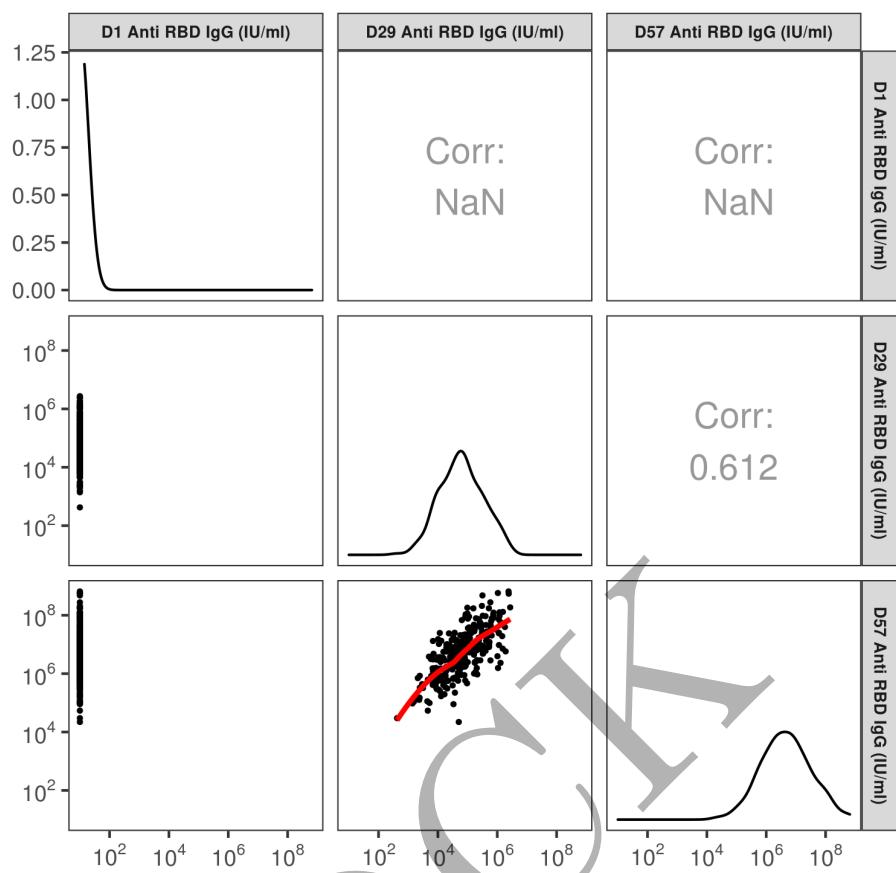


Figure 2.12: Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative vaccine arm

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

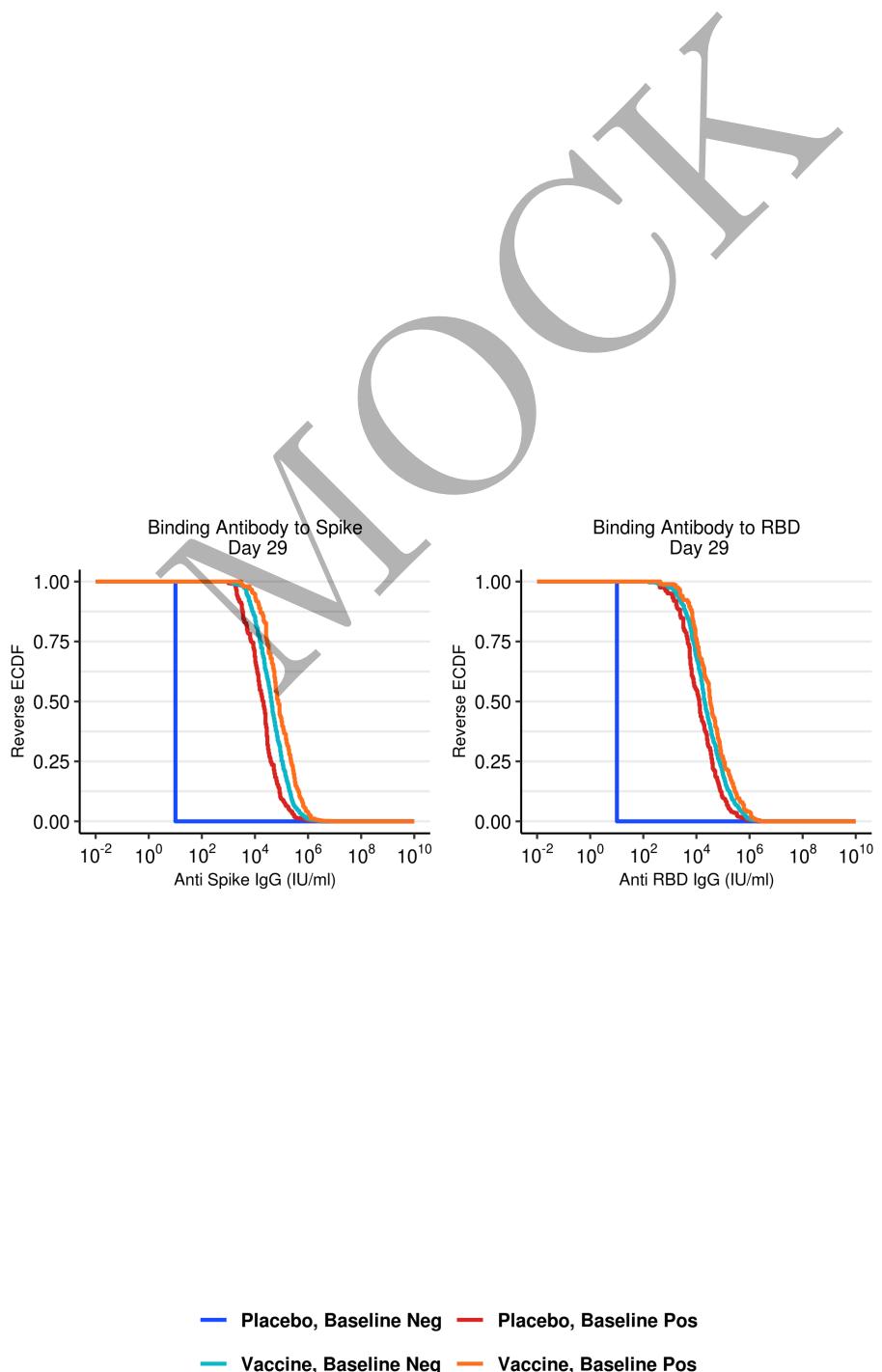


Figure 2.13: RCDF plots for D29 Ab markers: by baseline status x randomization arm

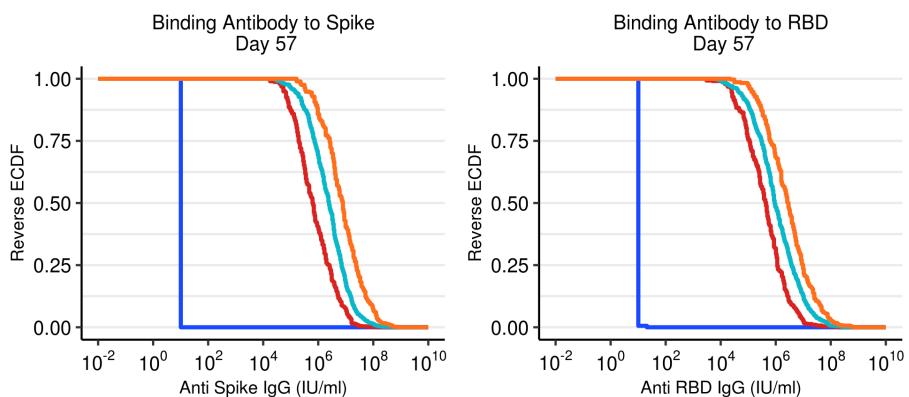


Figure 2.14: RCDF plots for D57 Ab markers: by baseline status x randomization arm

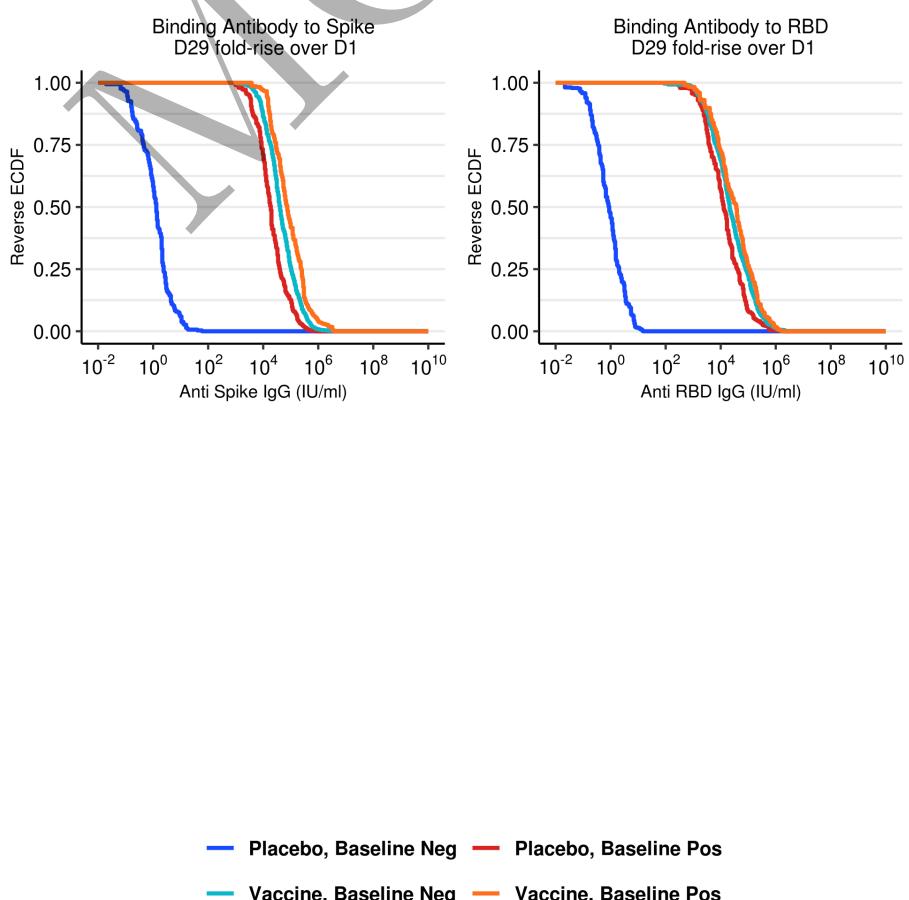


Figure 2.15: RCDF plots for D29 fold-rise over D1 Ab markers: by baseline status x randomization arm

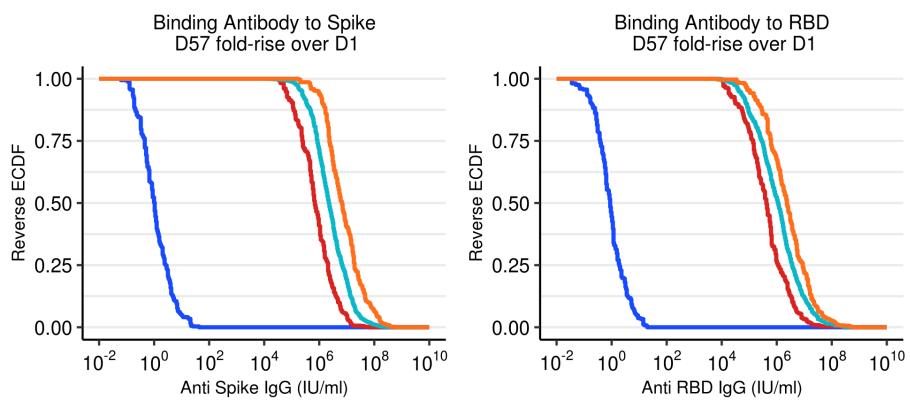


Figure 2.16: RCDF plots for D57 fold-rise over D1 Ab markers: by baseline status x randomization arm

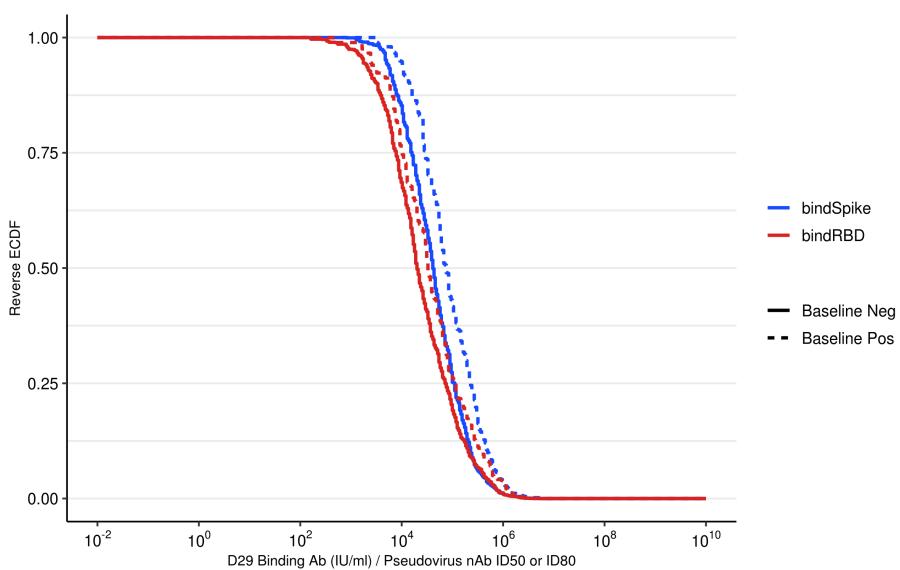


Figure 2.17: RCDF plots for D29 Ab markers: by baseline status for the vaccine arm

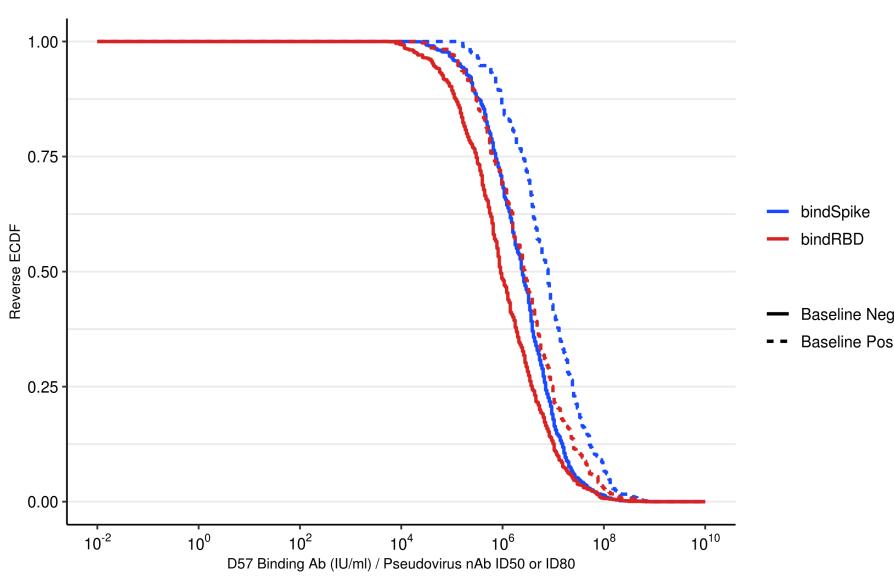


Figure 2.18: RCDF plots for D57 Ab markers: by baseline status for the vaccine arm

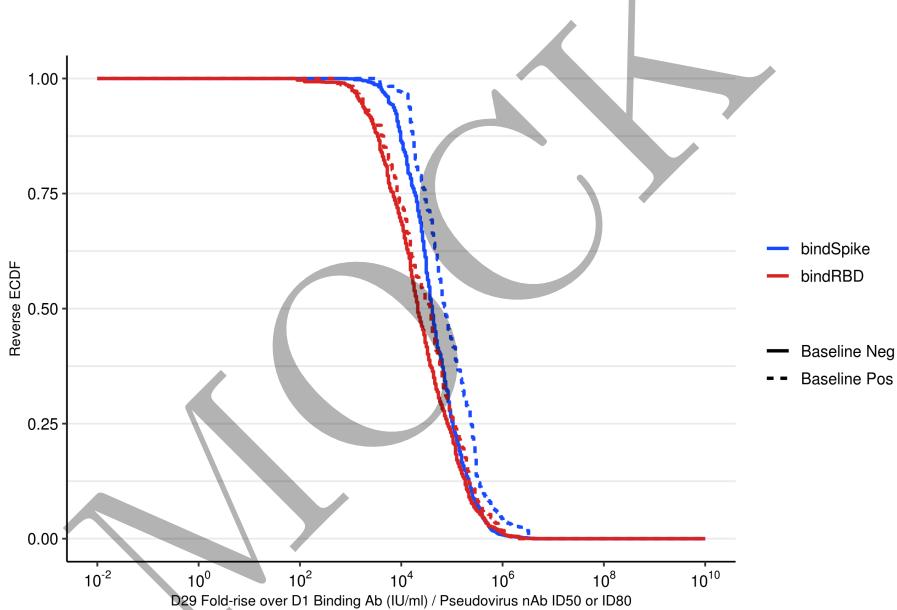


Figure 2.19: RCDF plots for D29 over D1 fold-rise Ab markers: by baseline status for the vaccine arm

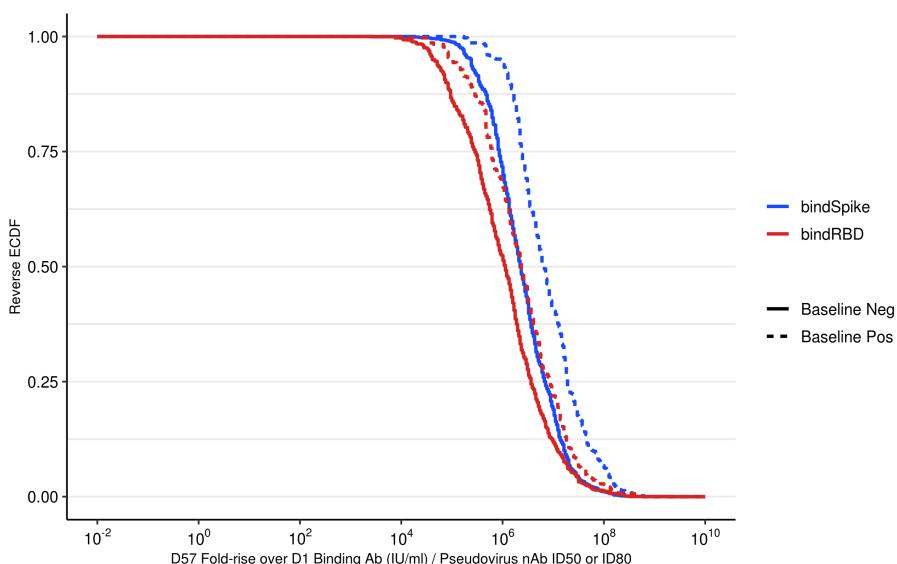


Figure 2.20: RCDF plots for D57 fold-rise over D1 Ab markers: by baseline status for the vaccine arm

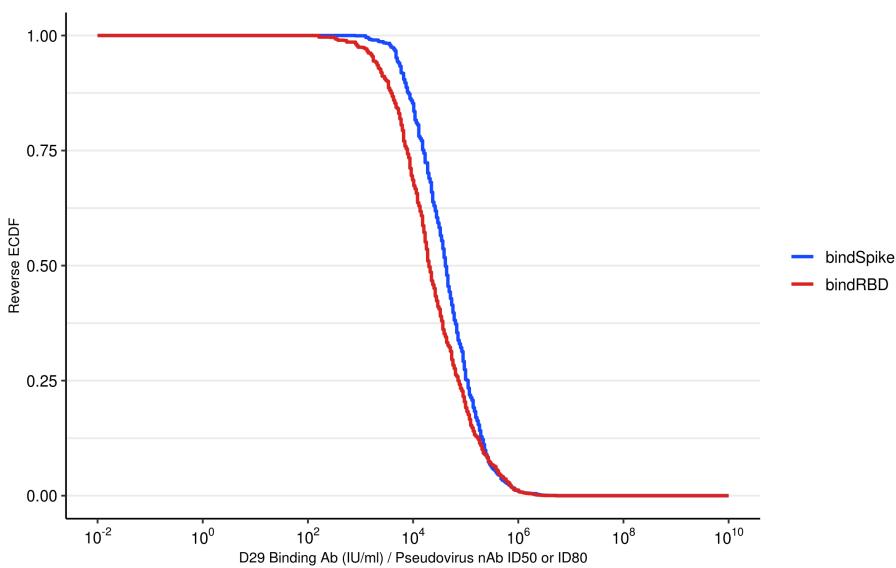


Figure 2.21: RCDF plots for D29 Ab markers: baseline negative vaccine arm

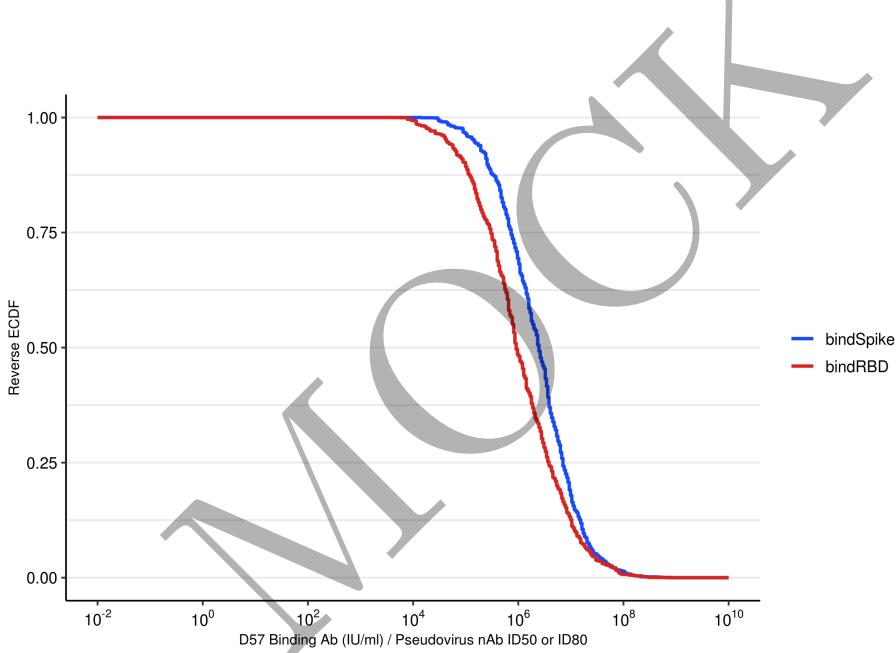


Figure 2.22: RCDF plots for D57 Ab markers: baseline negative vaccine arm

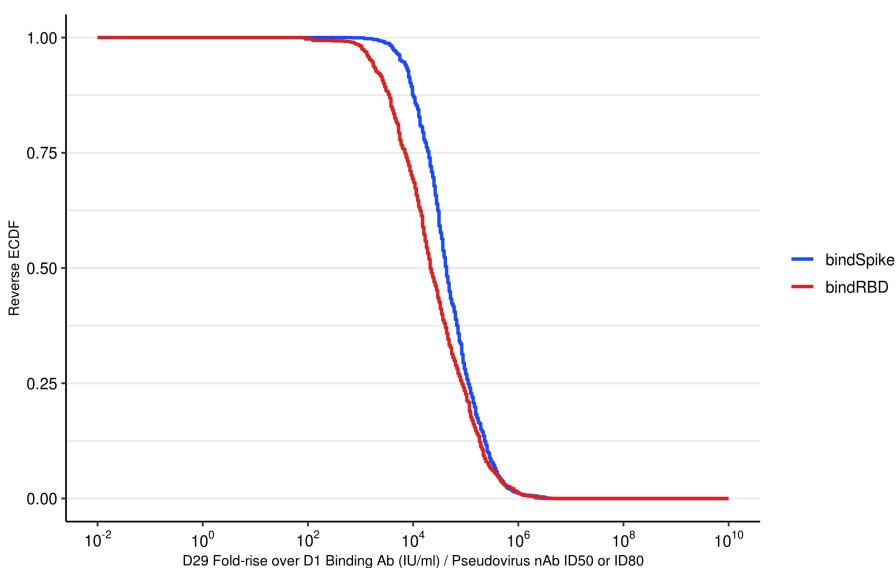


Figure 2.23: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm

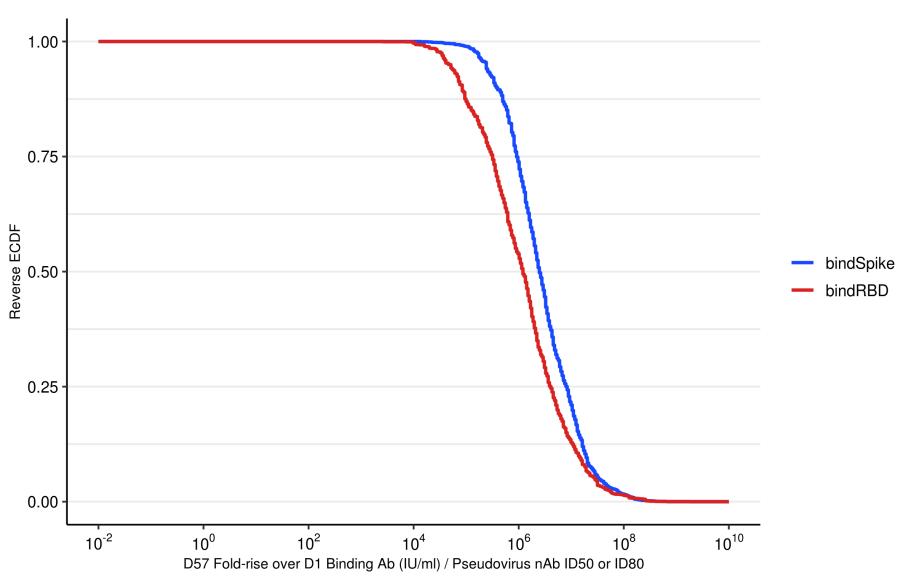


Figure 2.24: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm

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

2.3.1 Baseline SARS-CoV-2 negative

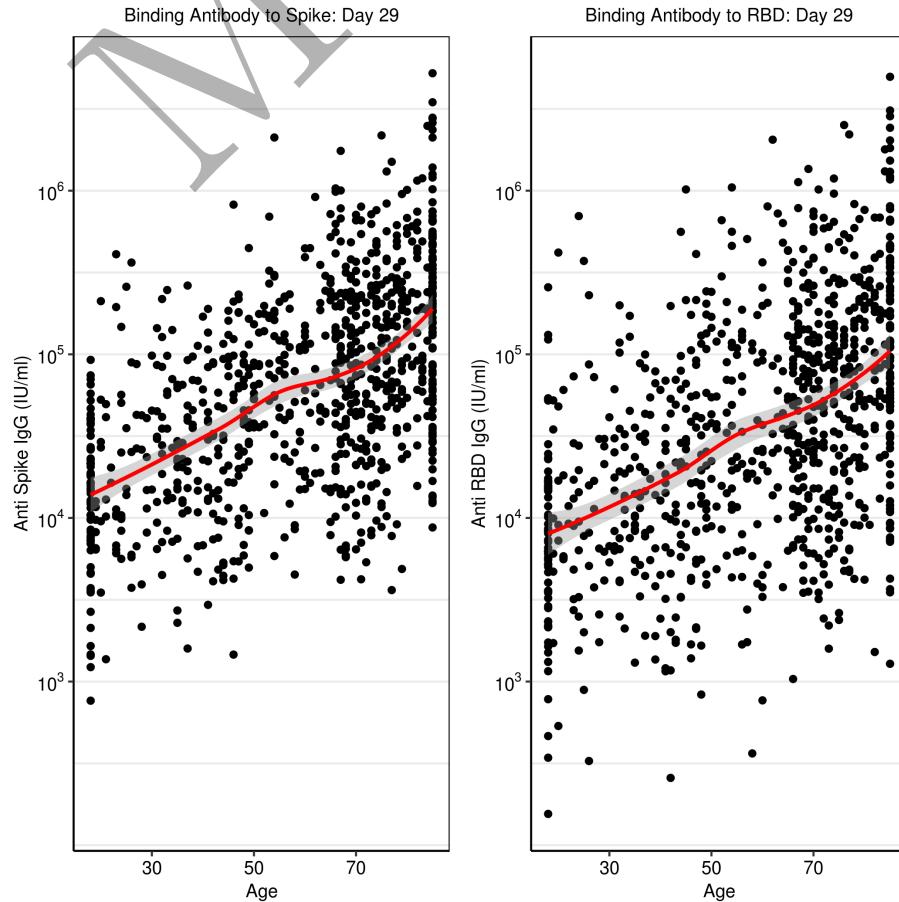


Figure 2.25: Scatter plots for D29 Ab markers vs. age: baseline negative vaccine arm

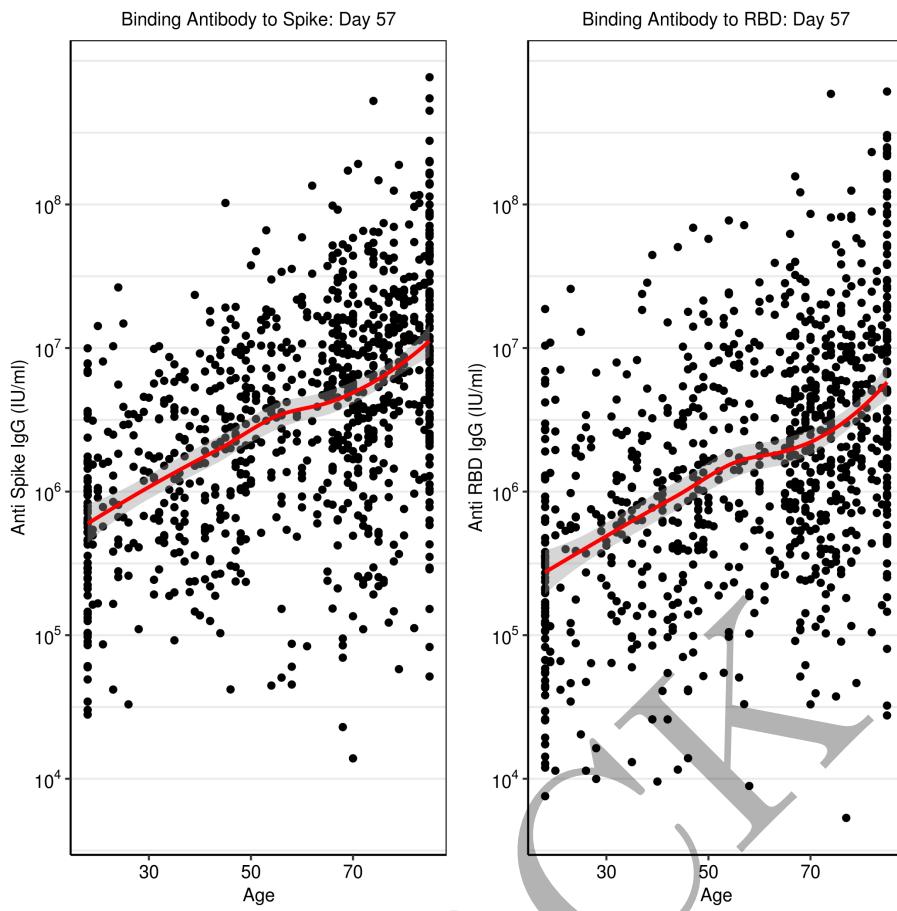


Figure 2.26: Scatter plots for D57 Ab markers vs. age; baseline negative vaccine arm

2.3.2 Baseline SARS-CoV-2 positive

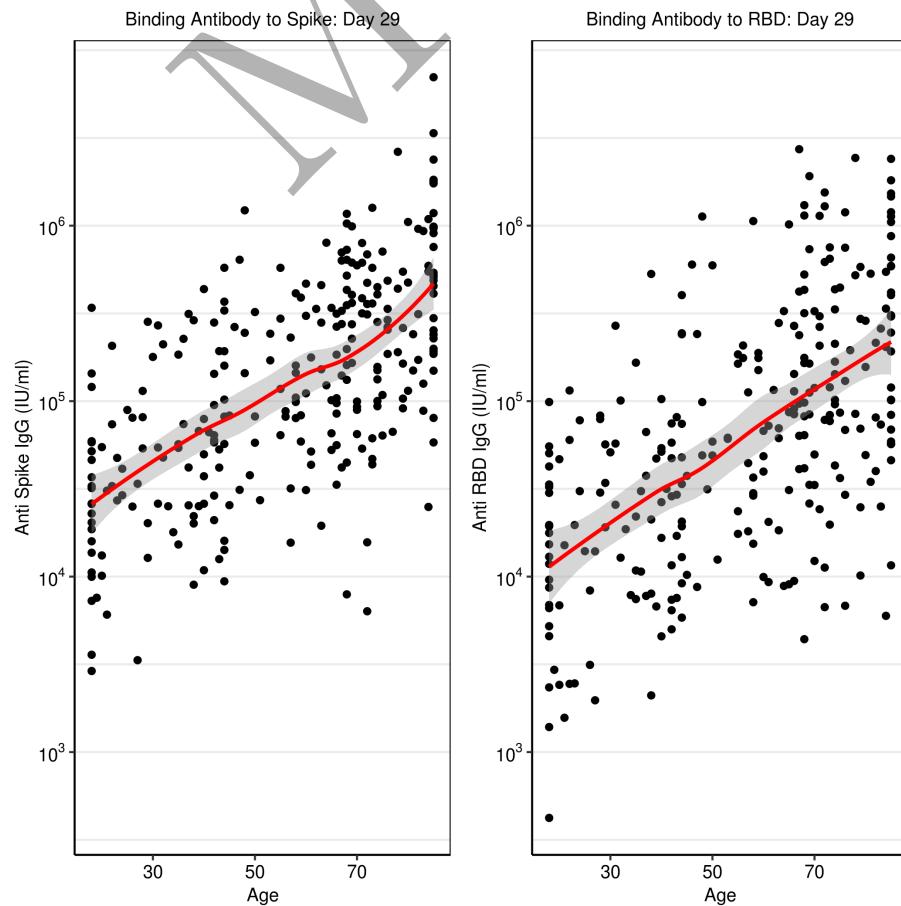


Figure 2.27: Scatter plots for D29 Ab markers vs. age: baseline positive vaccine arm

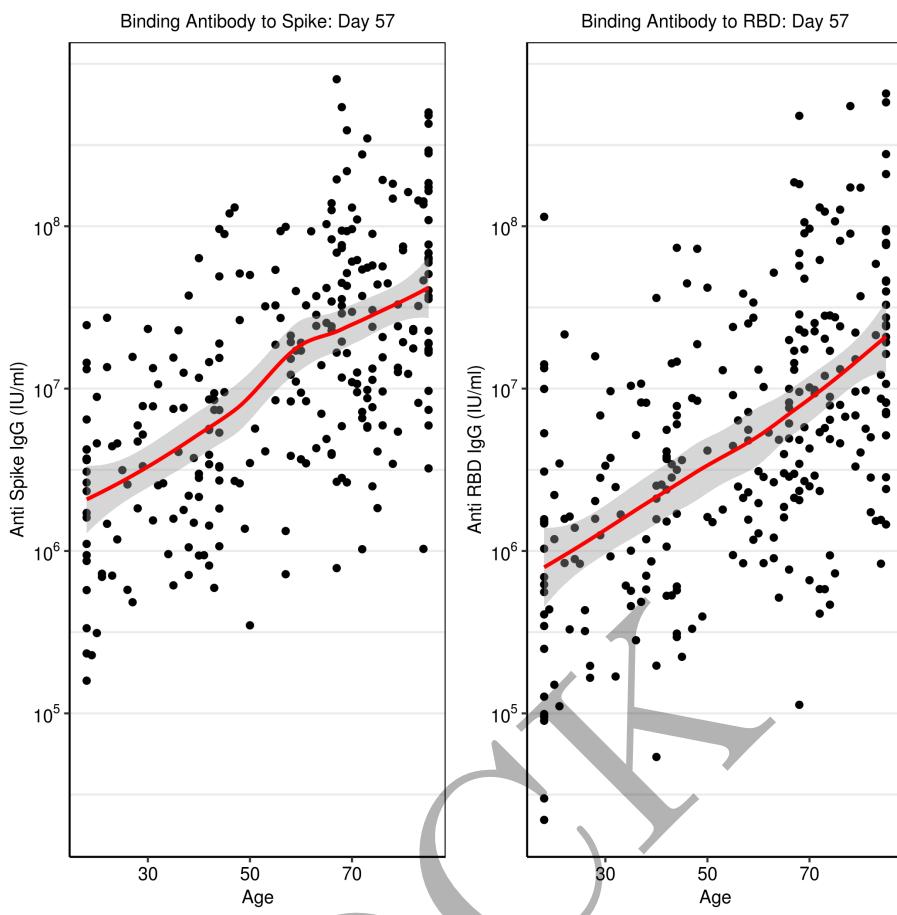


Figure 2.28: Scatter plots for D57 Ab markers vs. age: baseline positive vaccine arm

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

2.4.1 Baseline SARS-CoV-2 negative

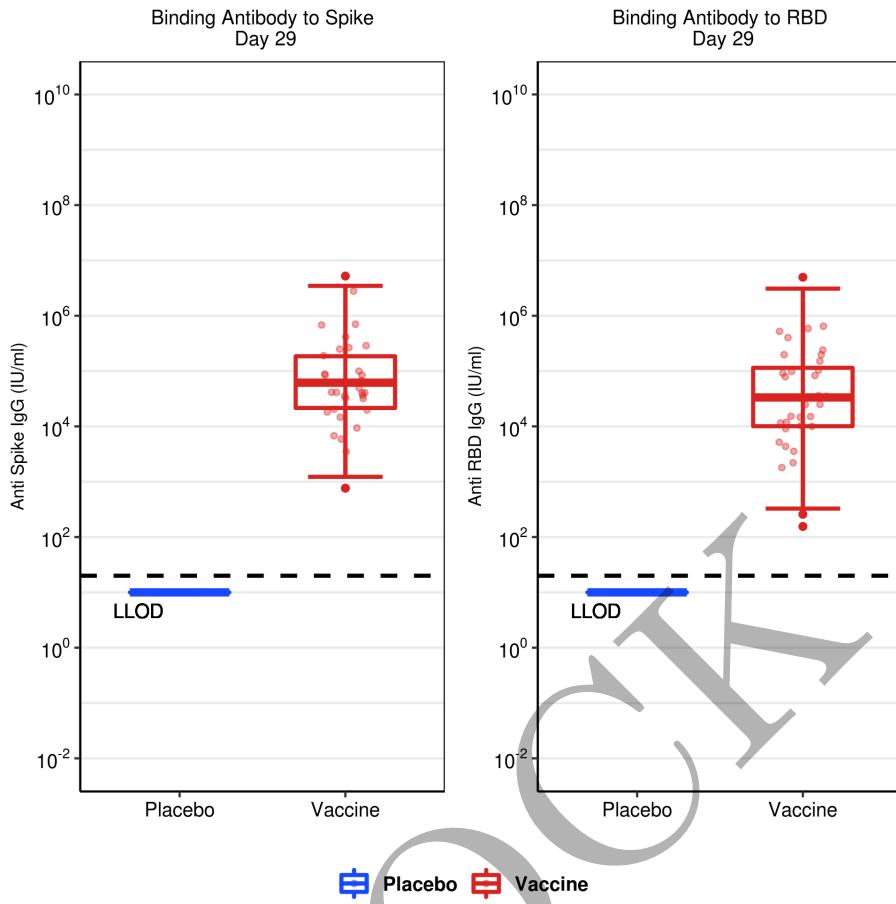


Figure 2.29: Boxplots of D29 Ab markers: baseline negative vaccine + placebo arms

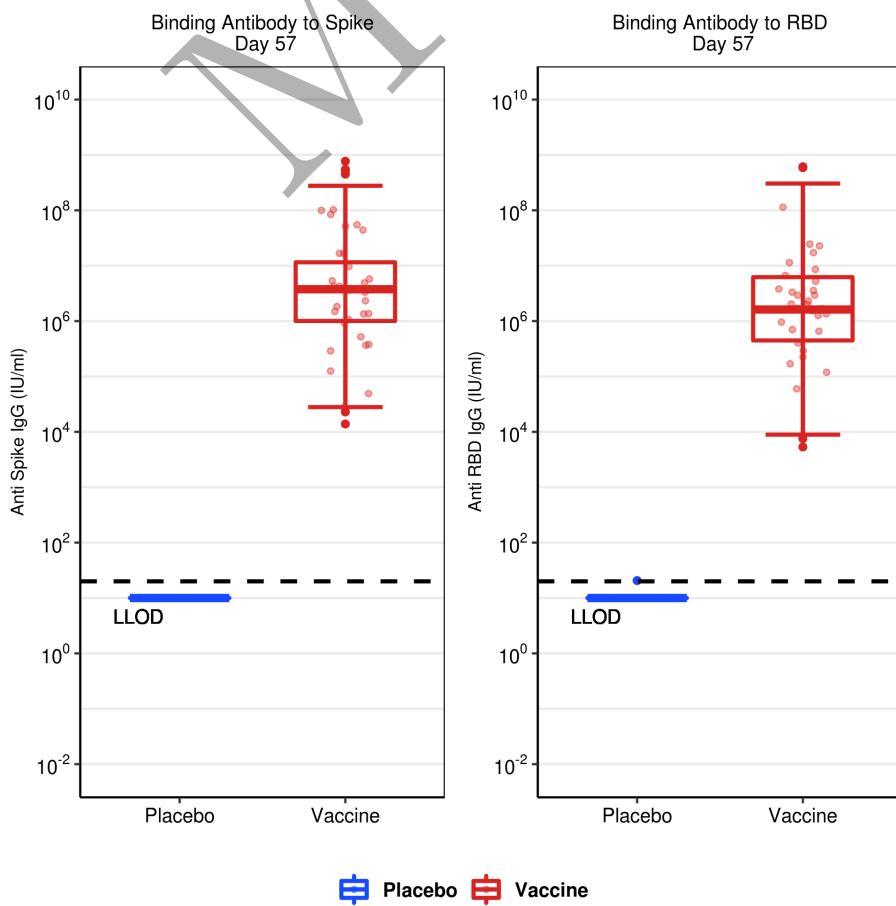


Figure 2.30: Boxplots of D57 Ab markers: baseline negative vaccine + placebo arms

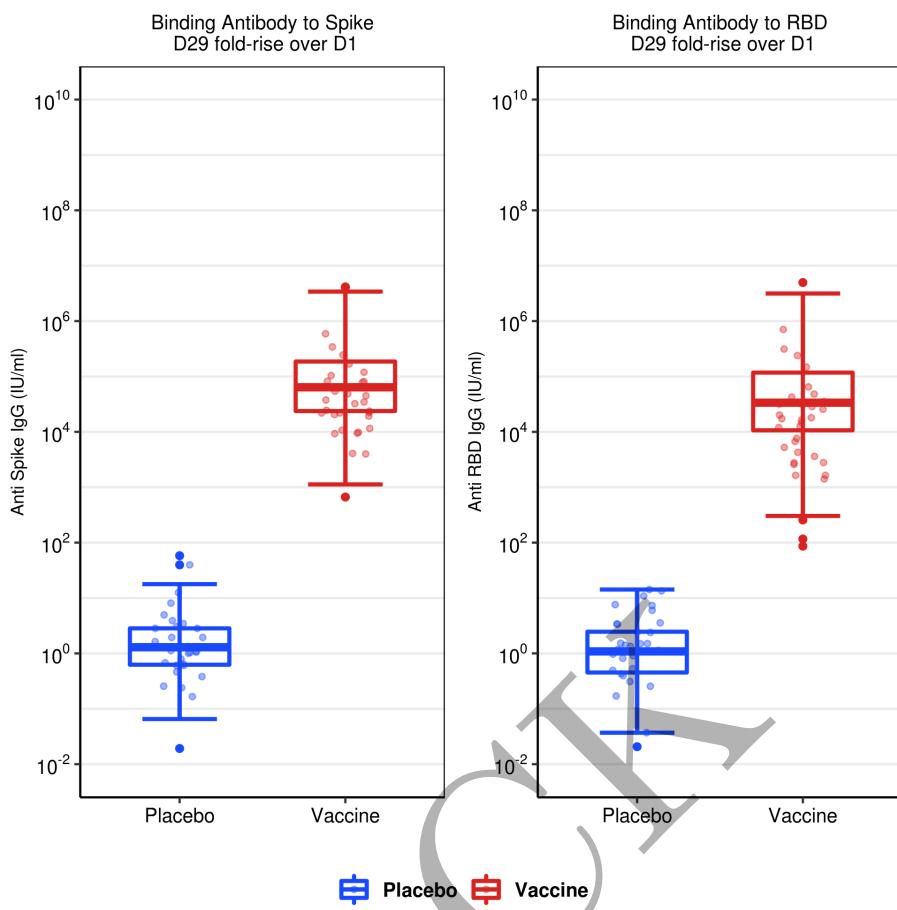


Figure 2.31: Boxplots of D29 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

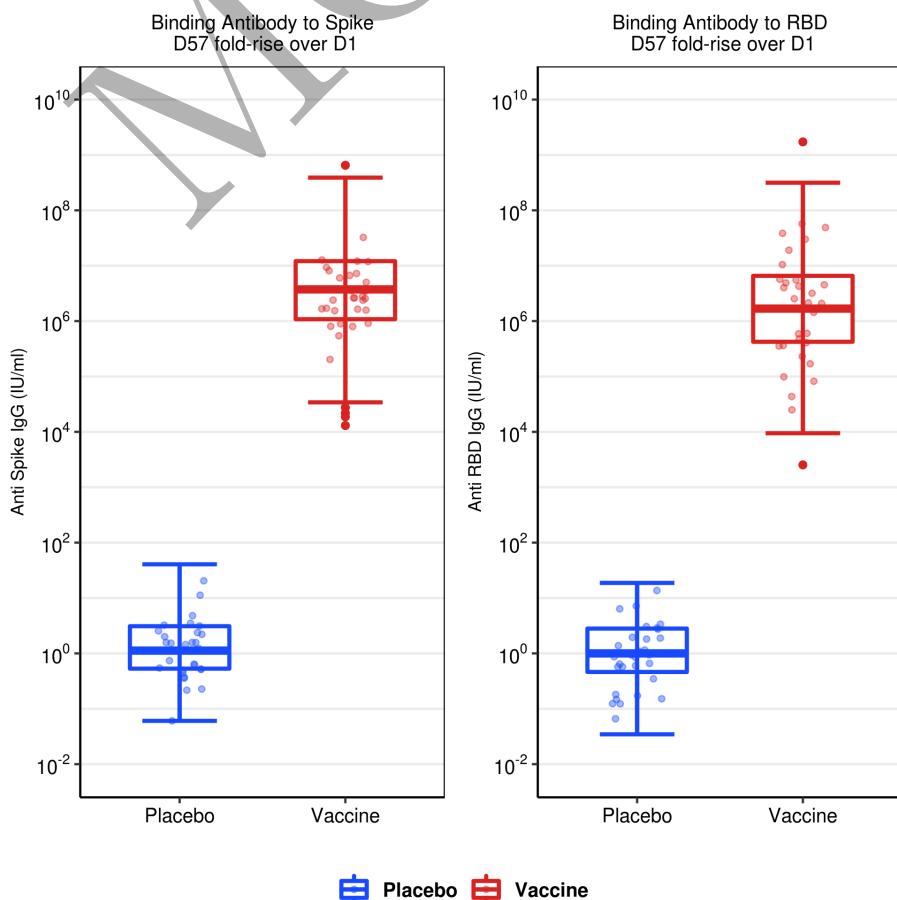


Figure 2.32: Boxplots of D57 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

2.4.2 Baseline SARS-CoV-2 positive

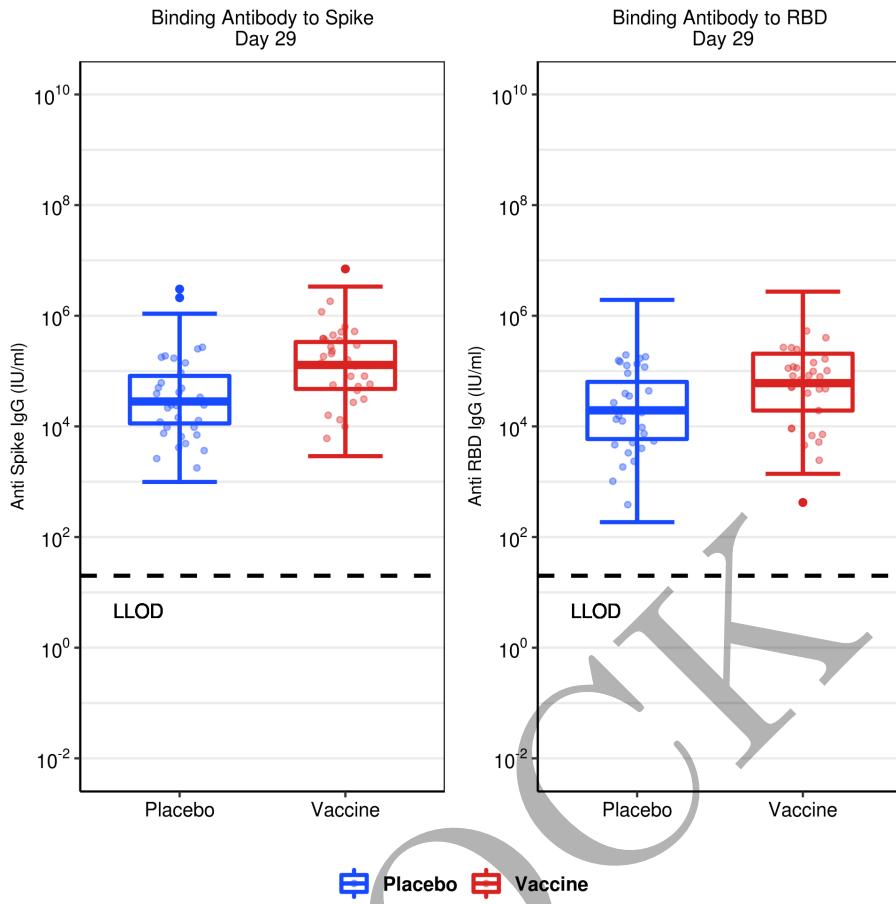


Figure 2.33: Boxplots of D29 Ab markers: baseline positive vaccine + placebo arms

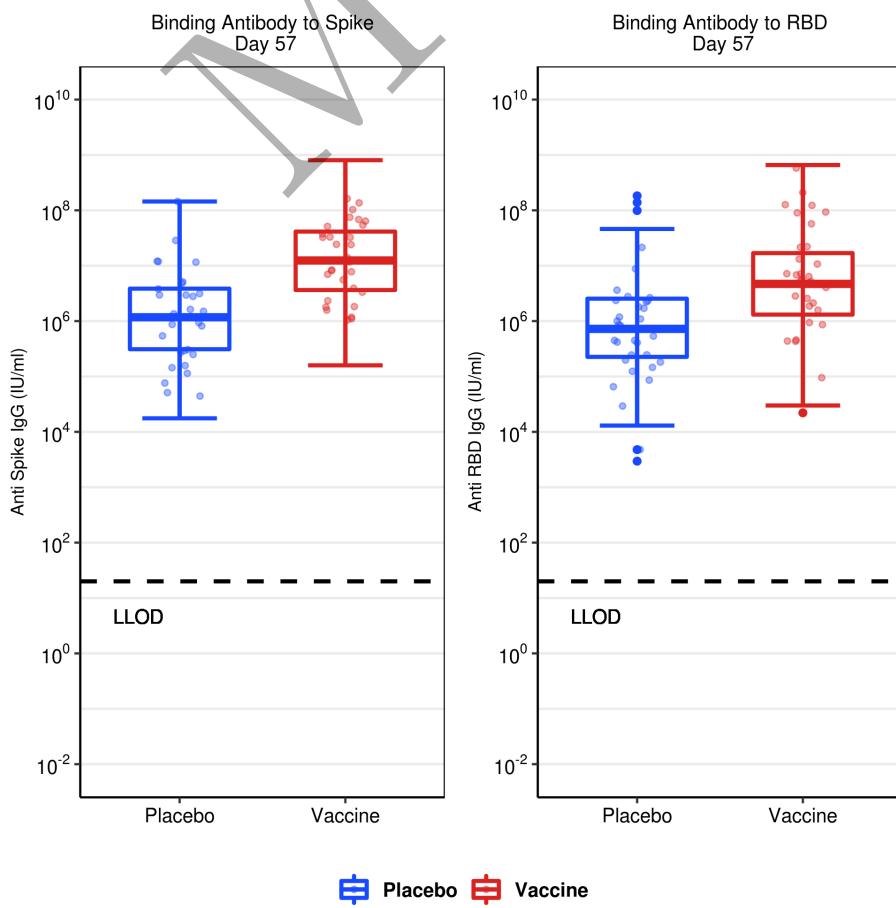


Figure 2.34: Boxplots of D57 Ab markers: baseline positive vaccine + placebo arms

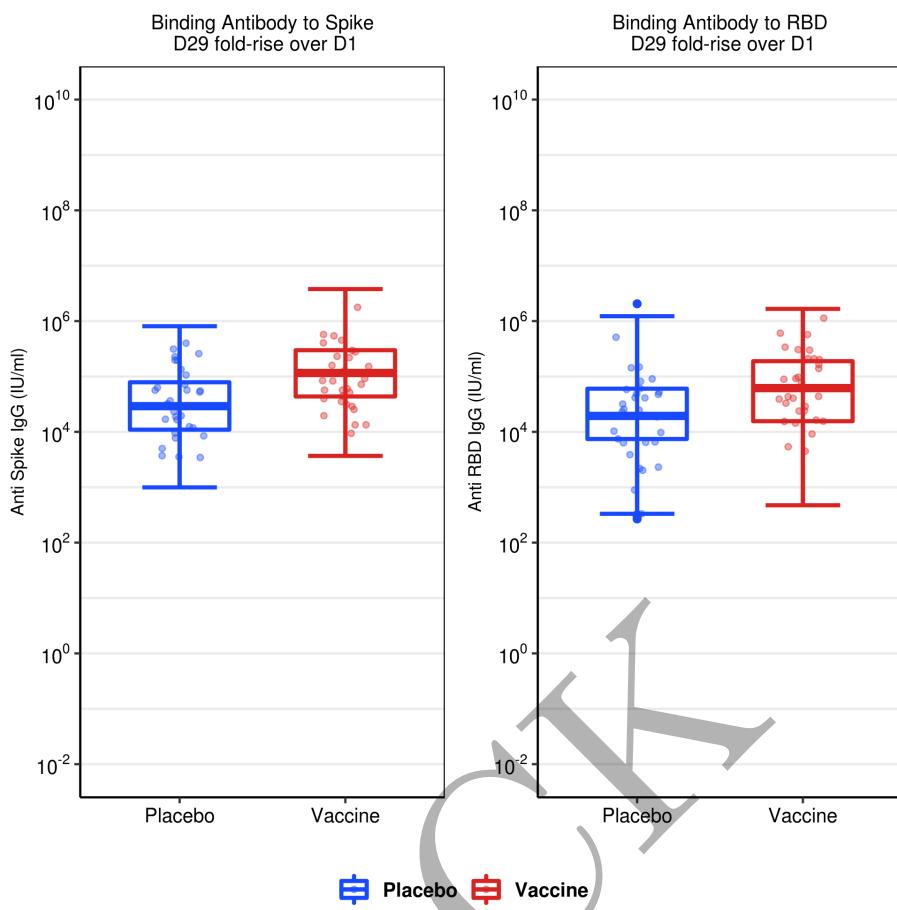


Figure 2.35: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms

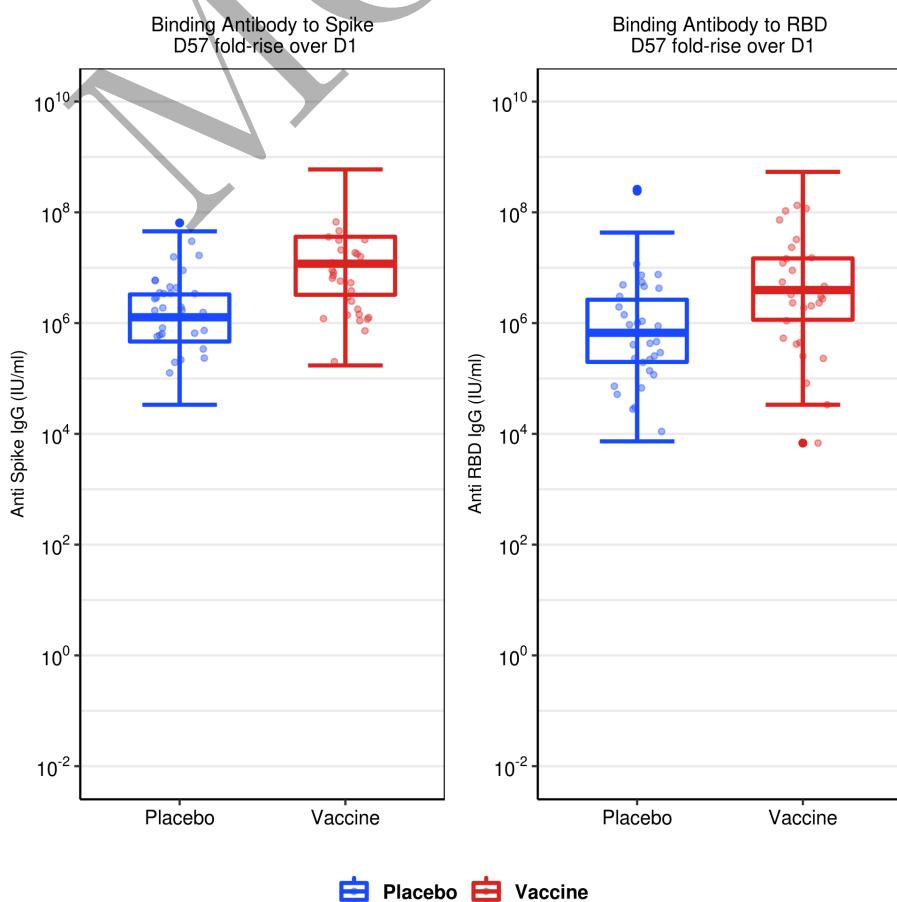


Figure 2.36: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms

2.4.3 Baseline negative vs. positive vaccine recipients

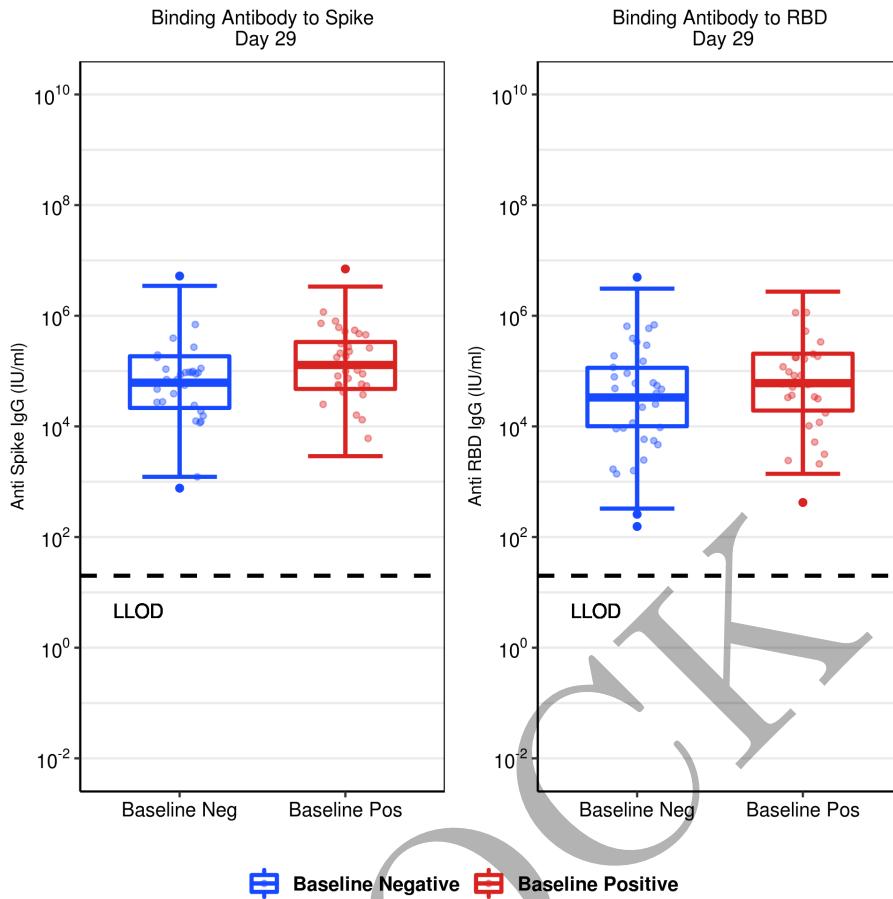


Figure 2.37: Boxplots of D29 Ab markers: baseline positive + negative vaccine arm

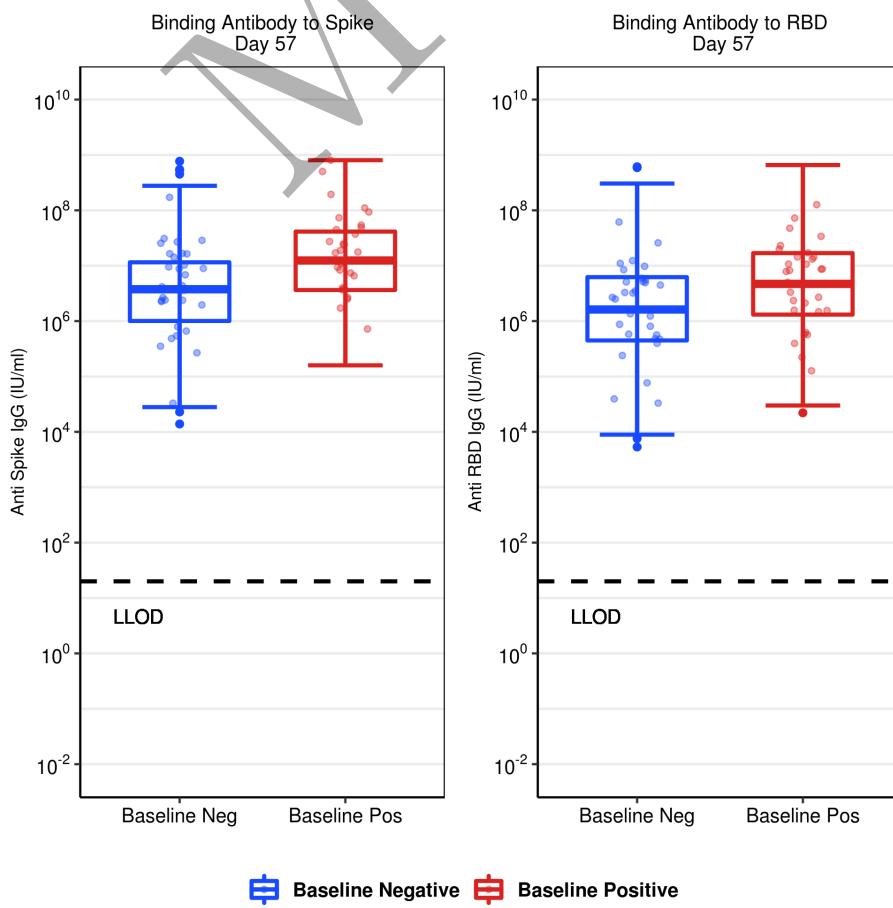


Figure 2.38: Boxplots of D57 Ab markers: baseline positive + negative vaccine arm

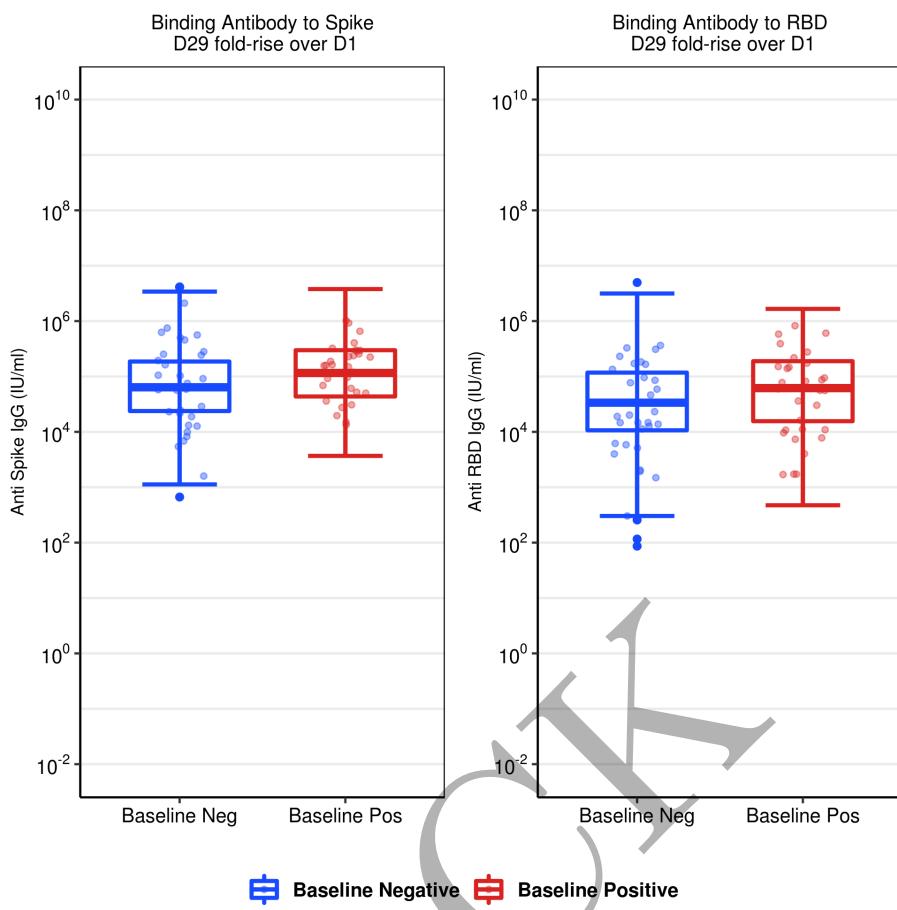


Figure 2.39: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm

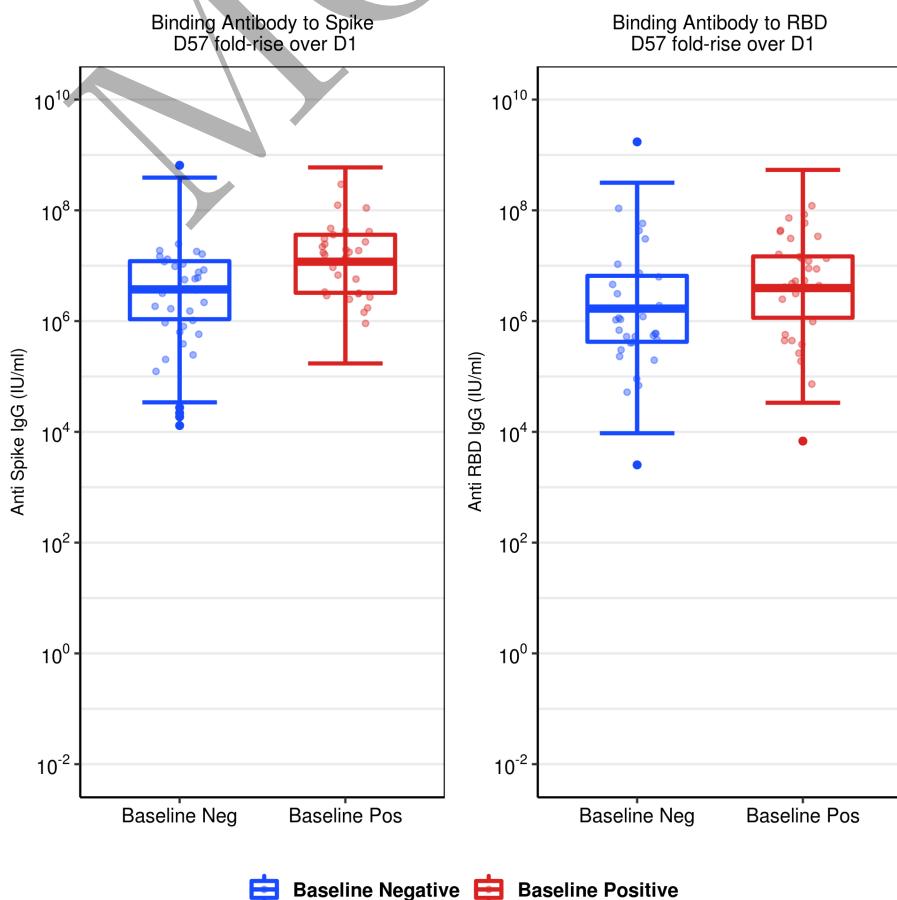


Figure 2.40: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm

2.4.4 Baseline negative vs. positive placebo recipients

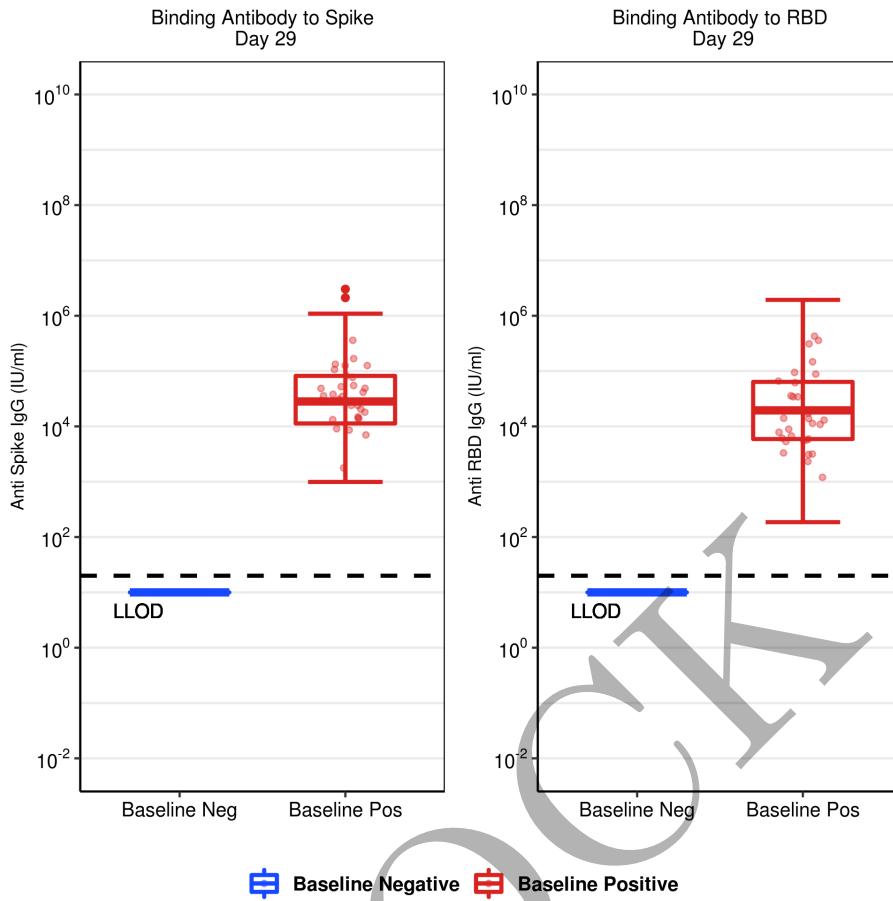


Figure 2.41: Boxplots of D29 Ab markers: baseline positive + negative placebo arm

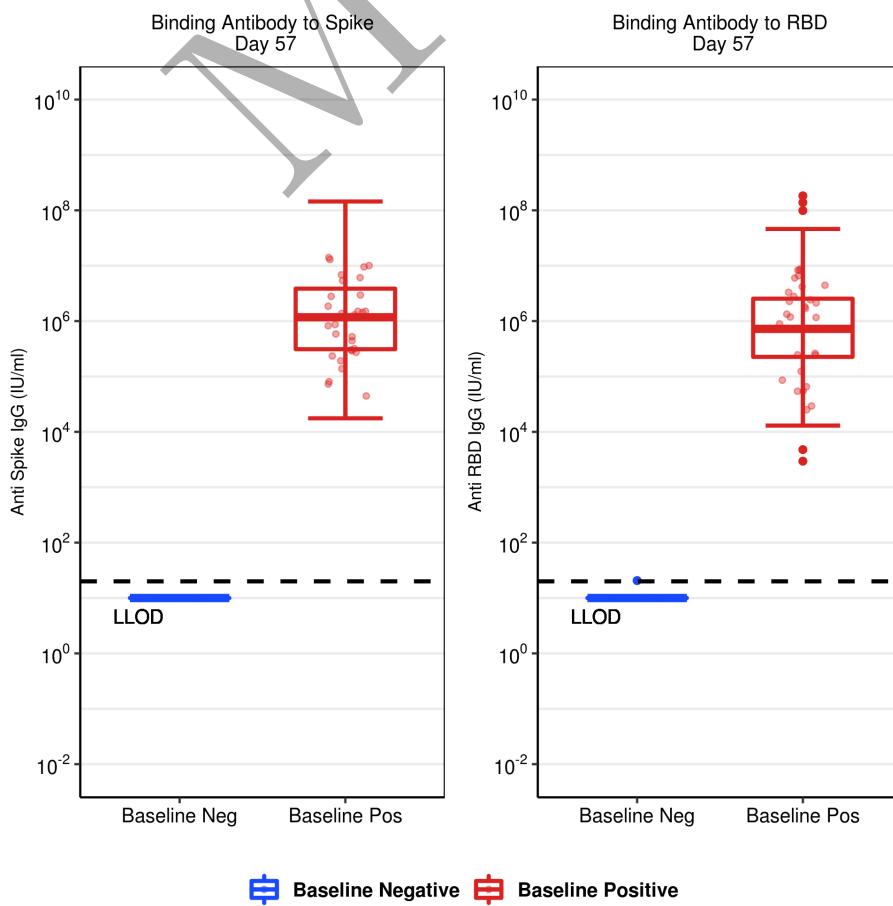


Figure 2.42: Boxplots of D57 Ab markers: baseline positive + negative placebo arm

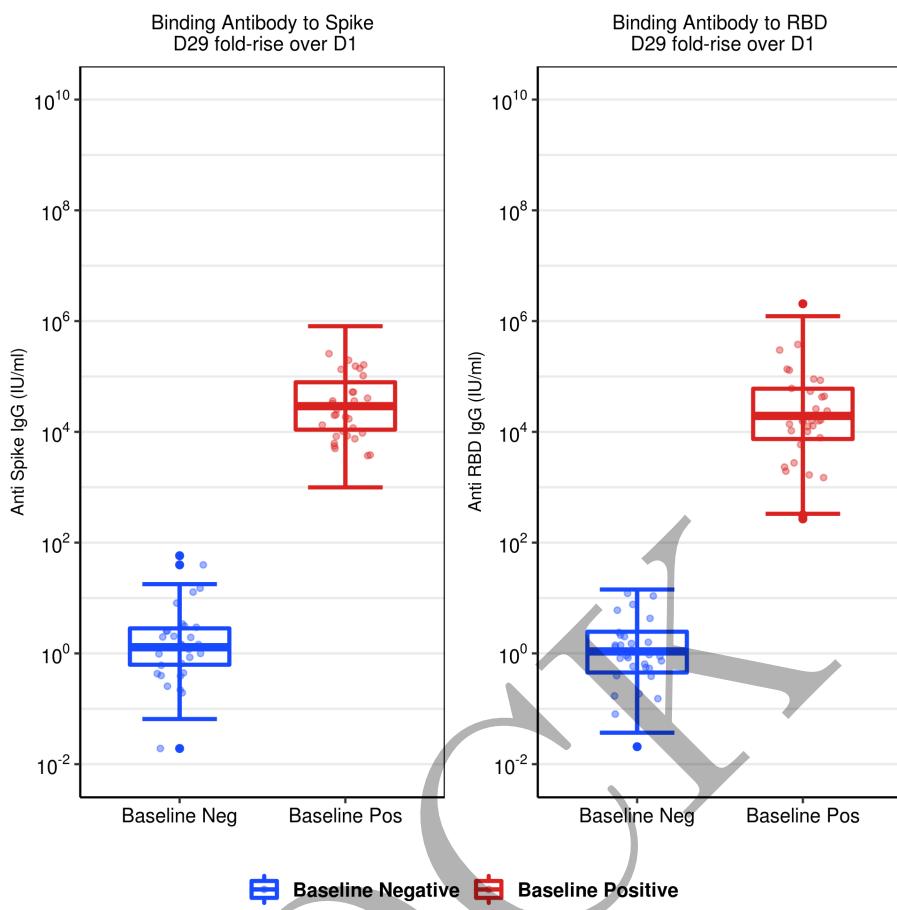


Figure 2.43: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

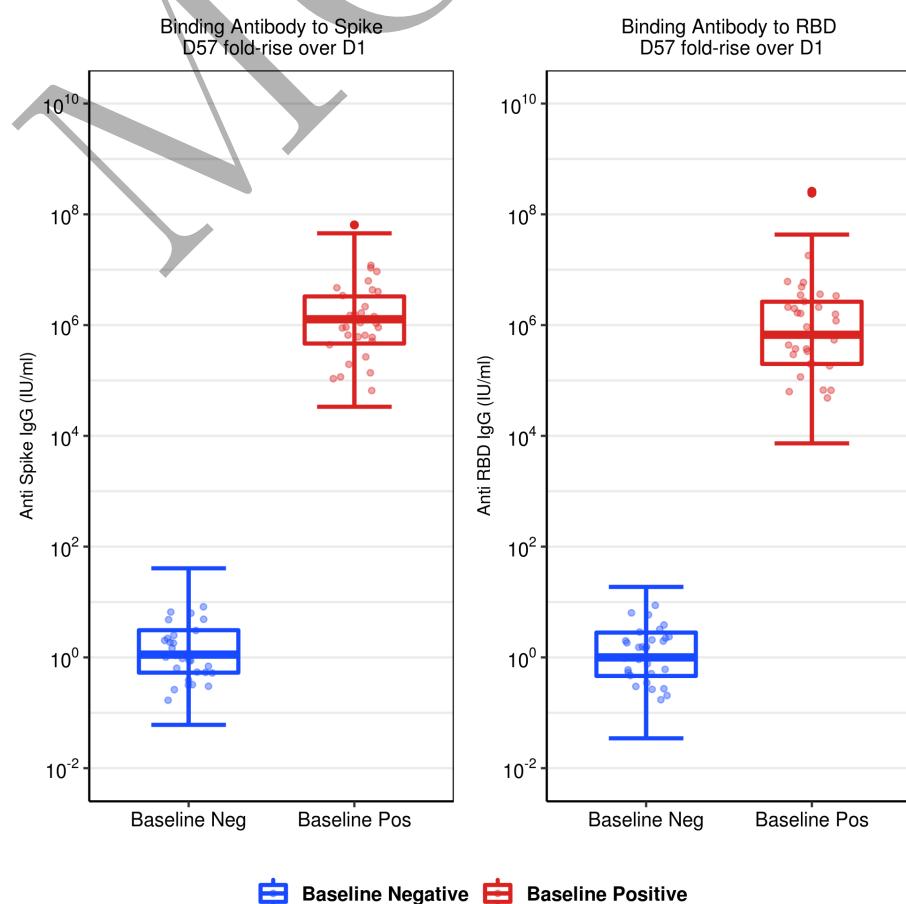


Figure 2.44: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

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

2.5.1 Baseline SARS-CoV-2 negative

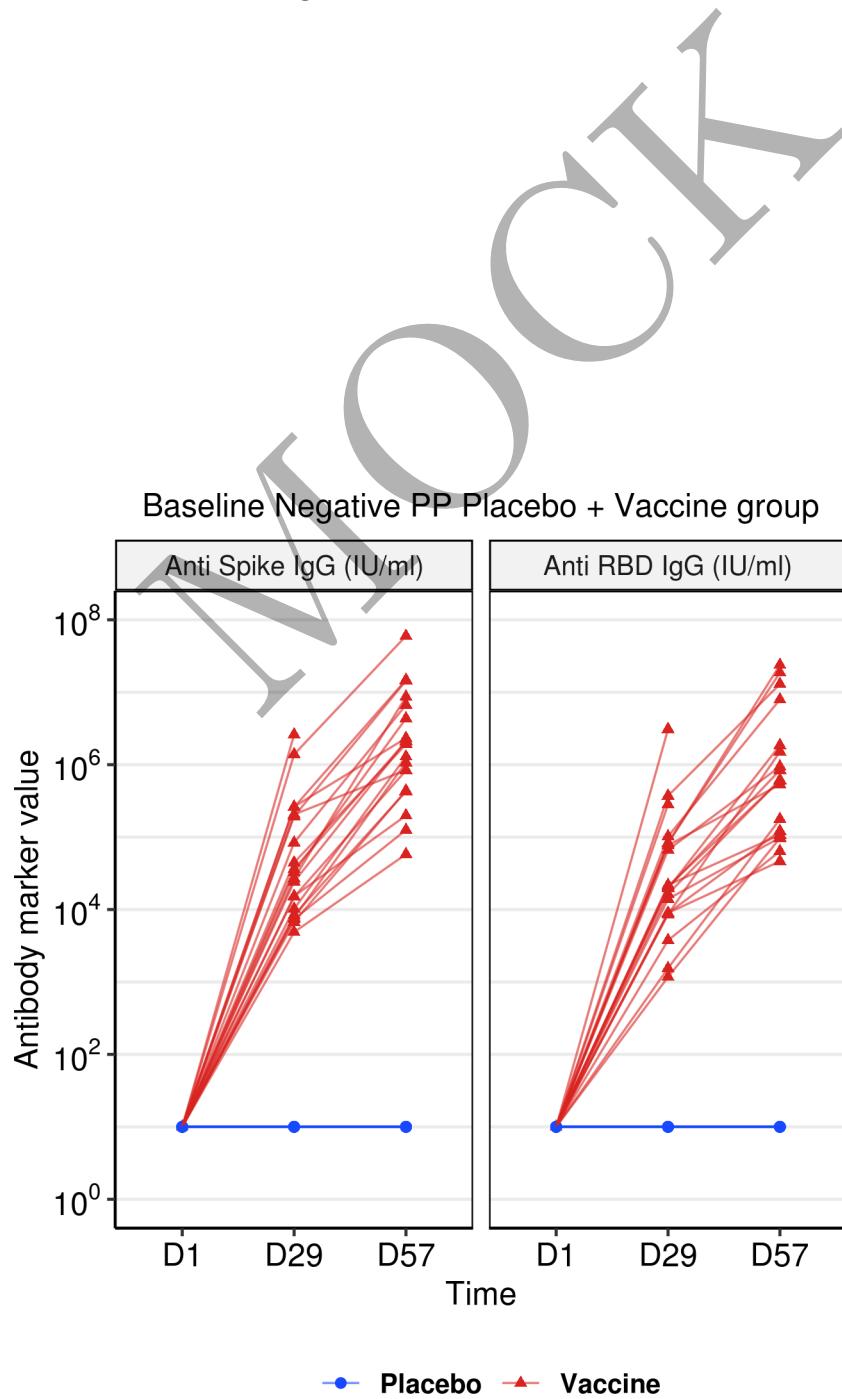


Figure 2.45: Spaghetti plots of Ab markers over time: baseline negative vaccine + placebo arm

2.5.2 Baseline SARS-CoV-2 positive

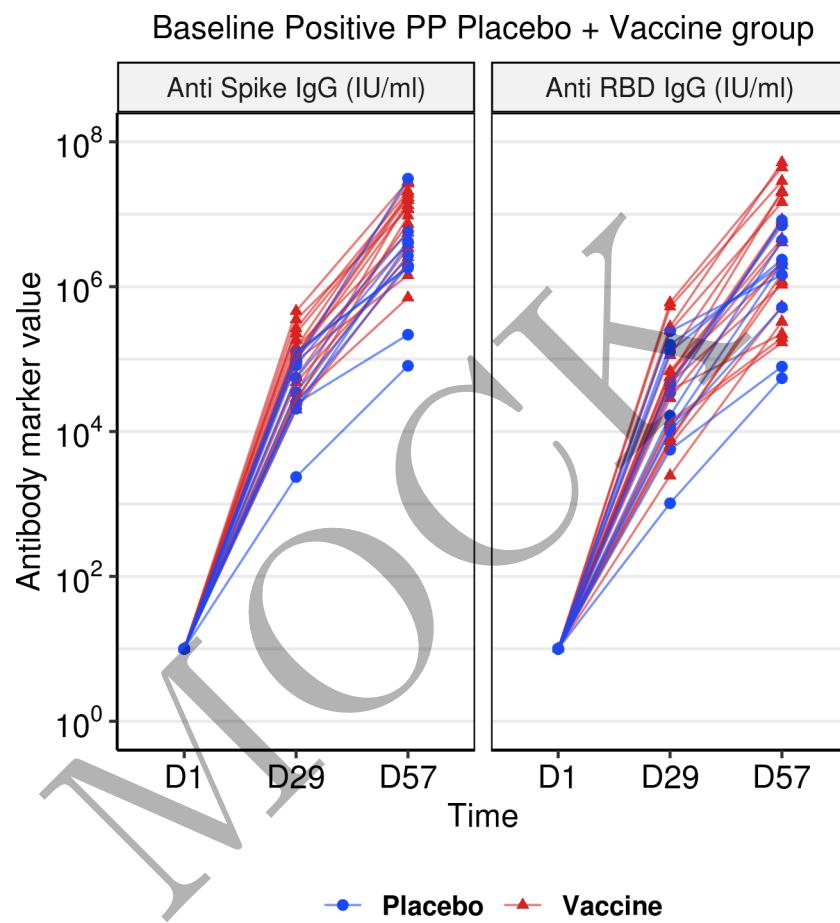


Figure 2.46: Spaghetti plots of Ab markers over time: baseline positive vaccine + placebo arm

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

2.6.1 Baseline SARS-CoV-2 negative

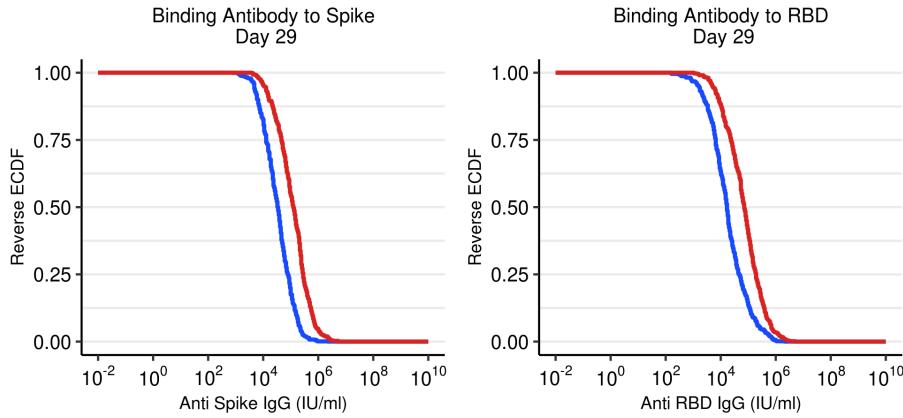


Figure 2.47: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age groups.

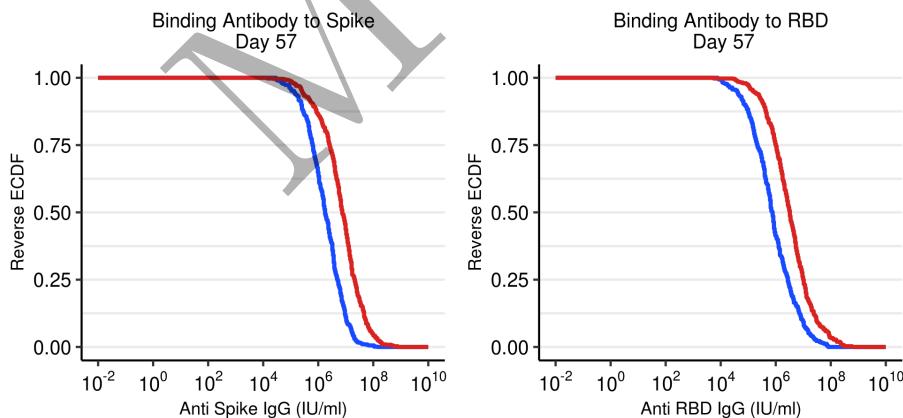


Figure 2.48: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age groups.

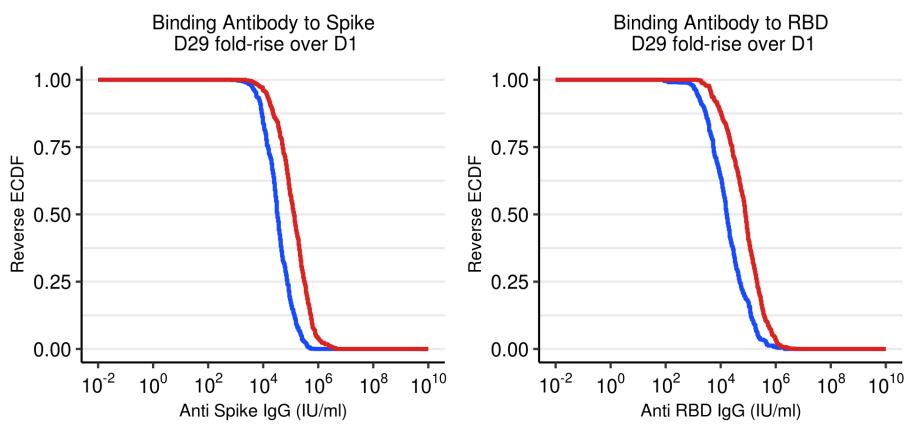


Figure 2.49: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

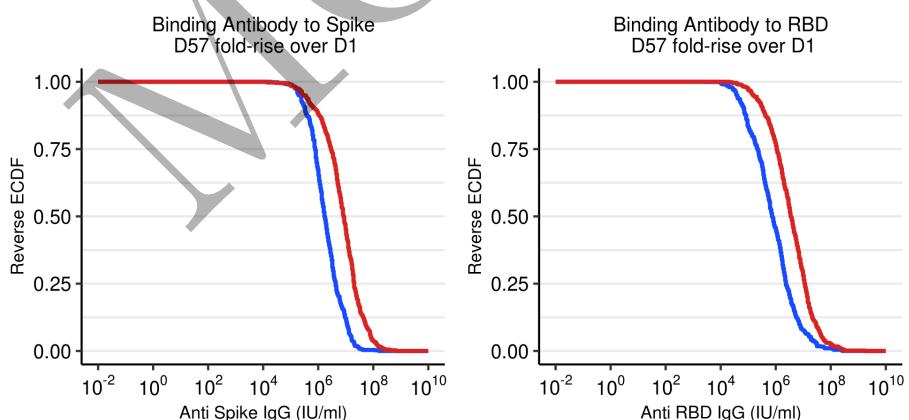


Figure 2.50: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

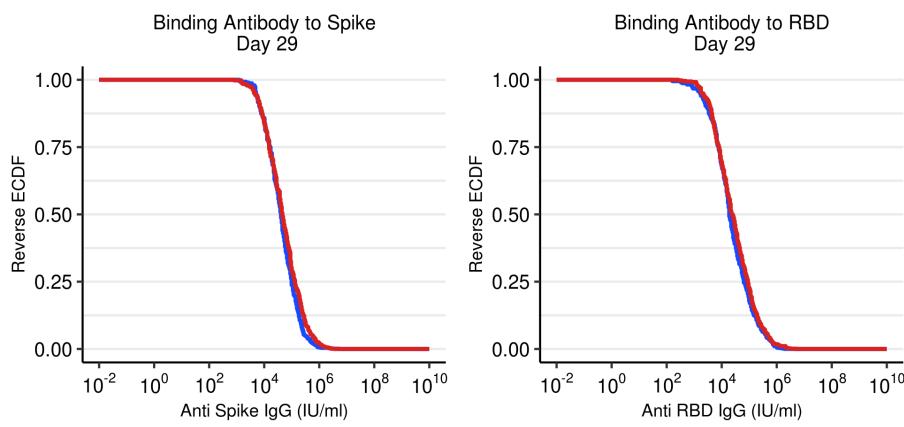


Figure 2.51: RCDF plots for D29 Ab markers: baseline negative vaccine arm by high-risk condition.

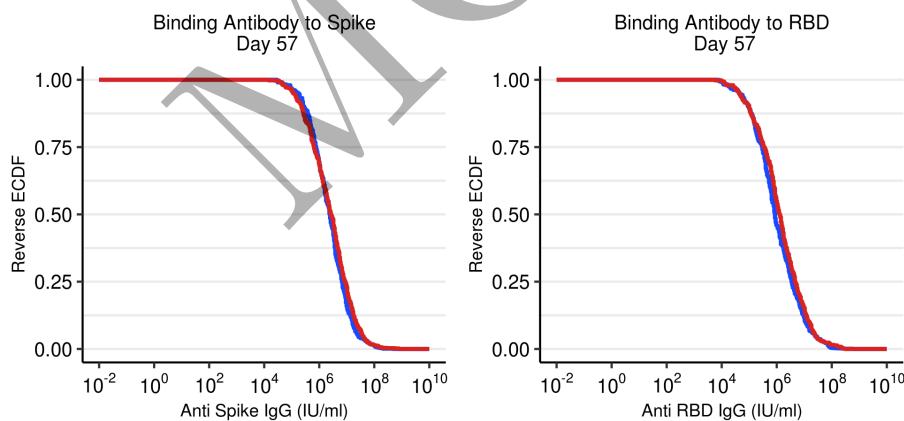


Figure 2.52: RCDF plots for D57 Ab markers: baseline negative vaccine arm by high-risk condition.

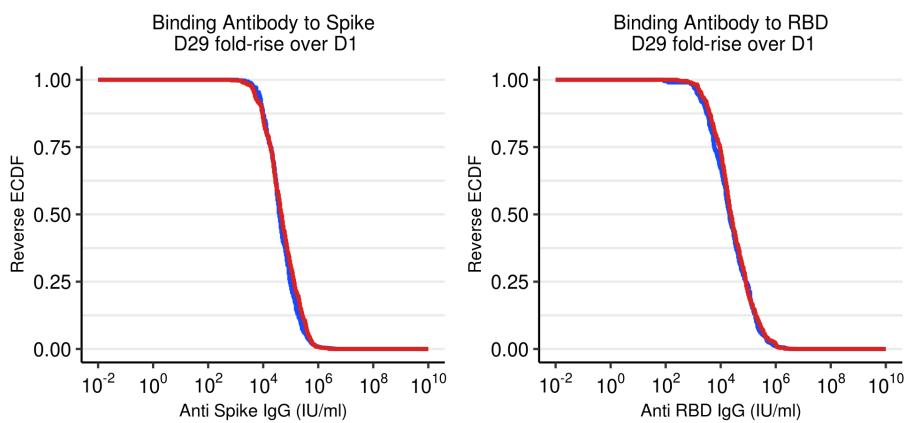


Figure 2.53: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

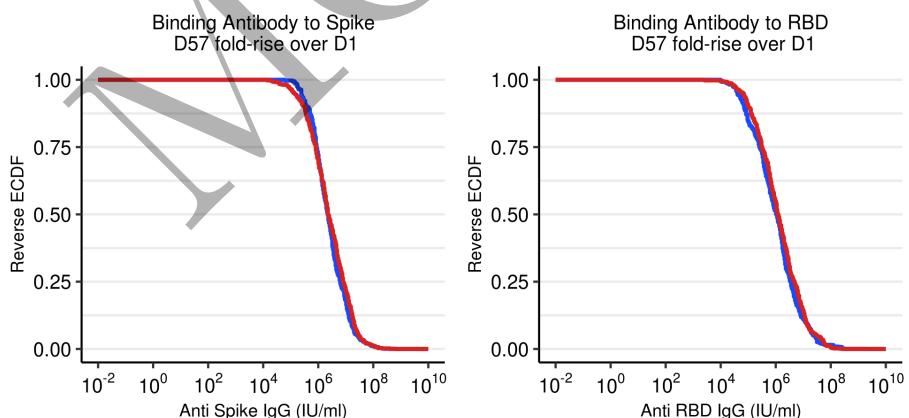


Figure 2.54: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

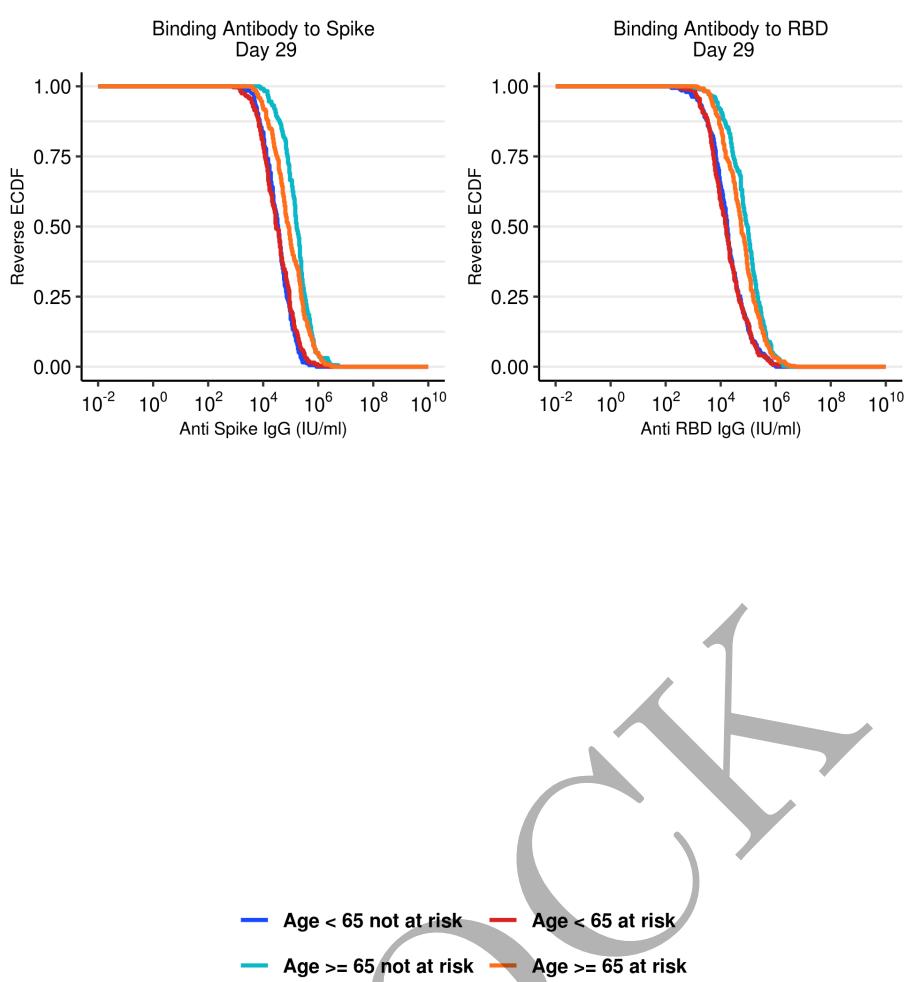


Figure 2.55: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and high-risk condition.

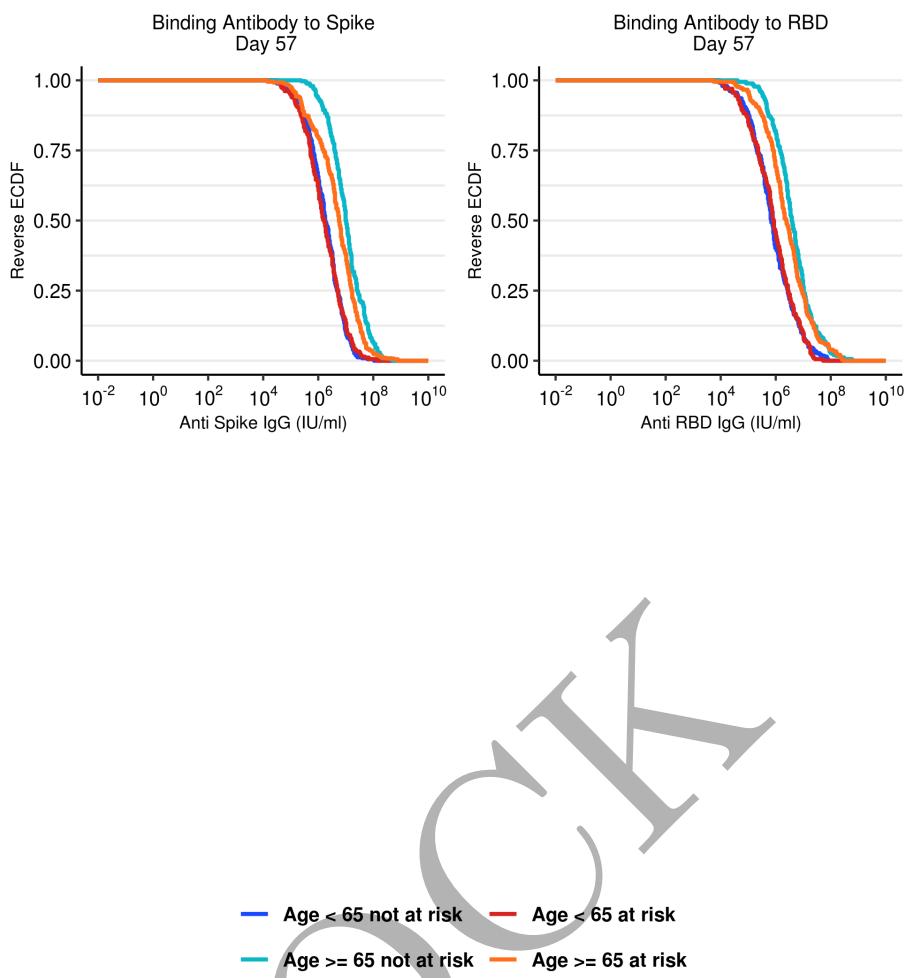


Figure 2.56: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and high-risk condition.

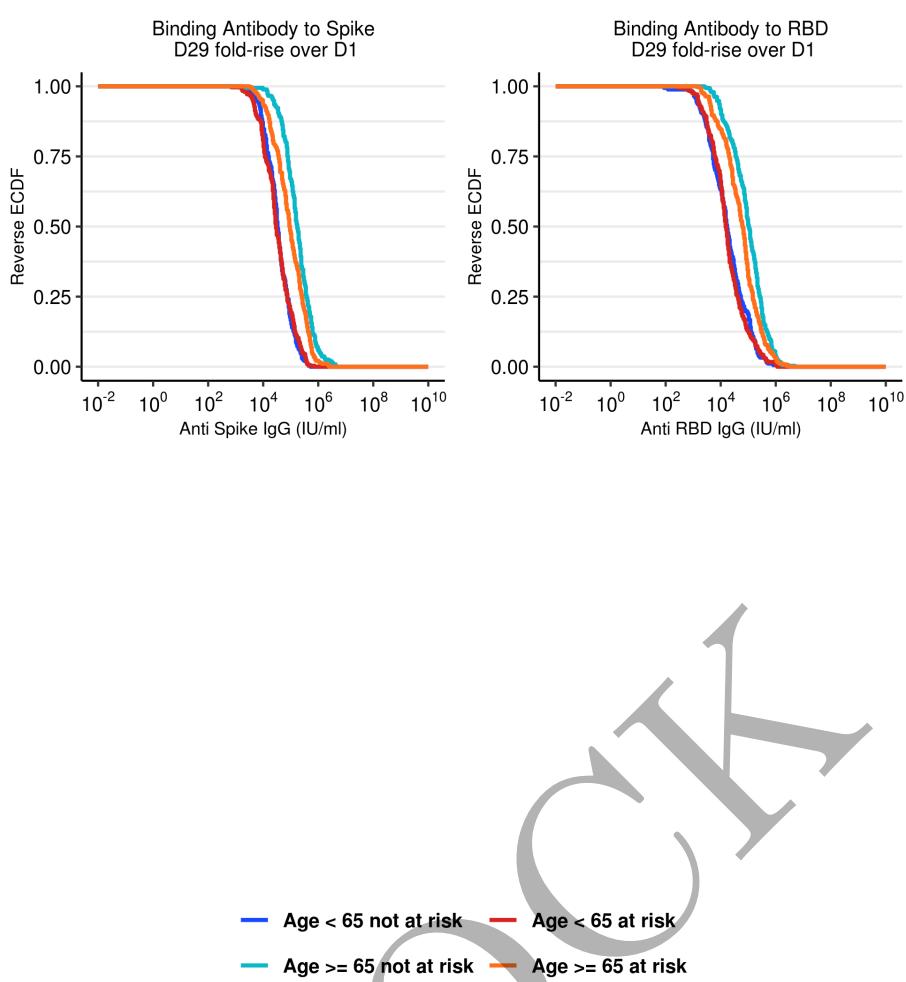


Figure 2.57: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.

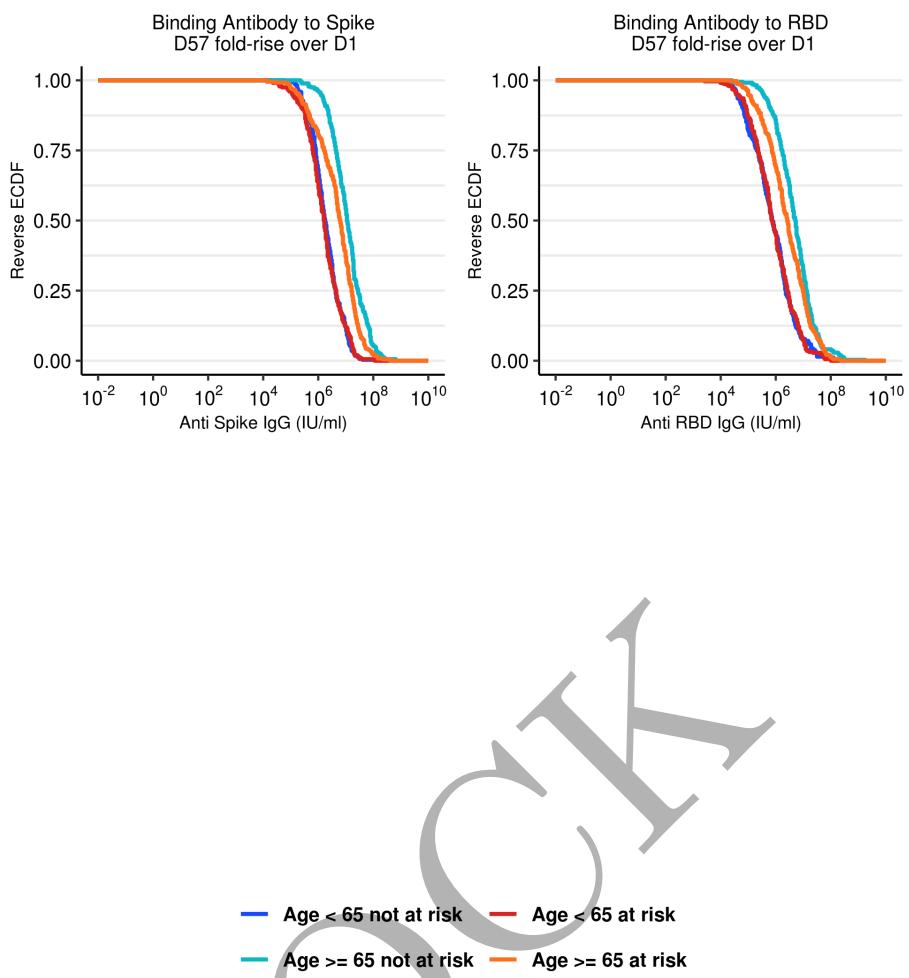


Figure 2.58: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.

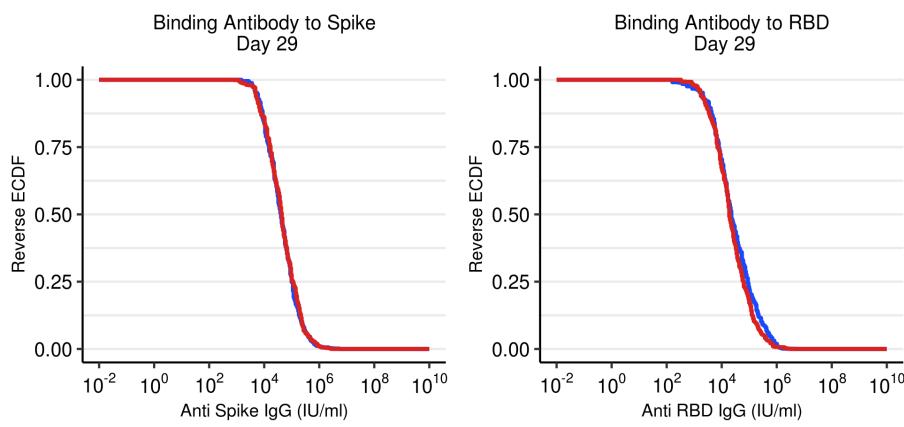


Figure 2.59: RCDF plots for D29 Ab markers: baseline negative vaccine arm by sex assigned at birth.

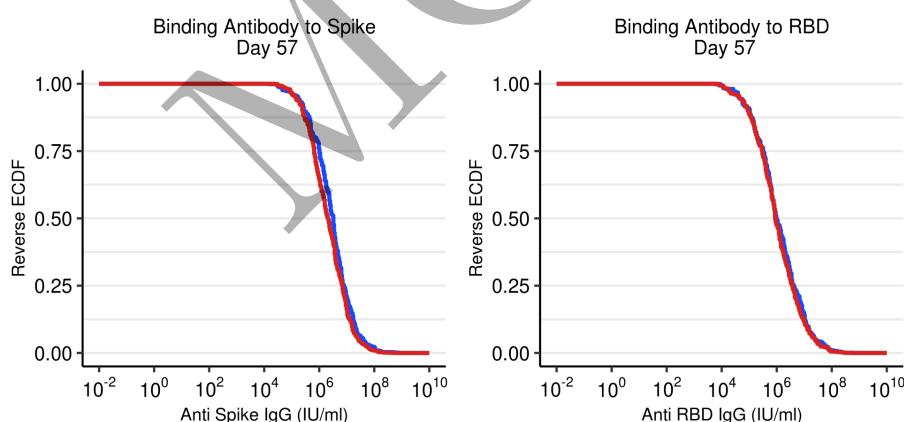


Figure 2.60: RCDF plots for D57 Ab markers: baseline negative vaccine arm by sex assigned at birth.

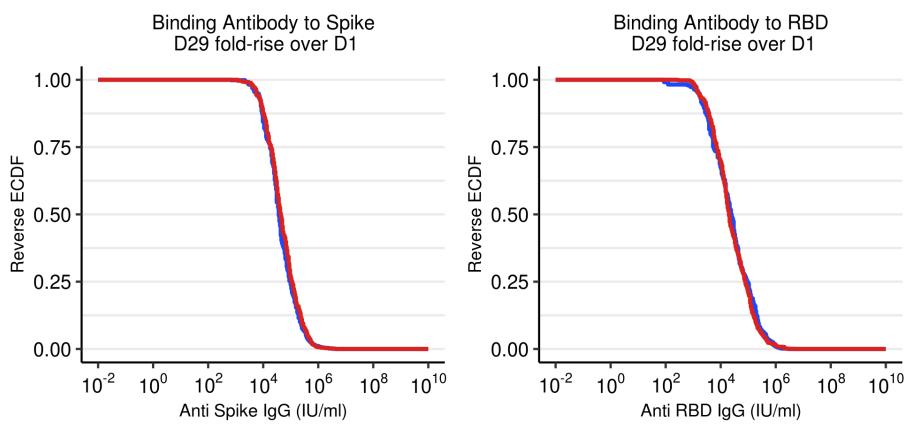


Figure 2.61: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

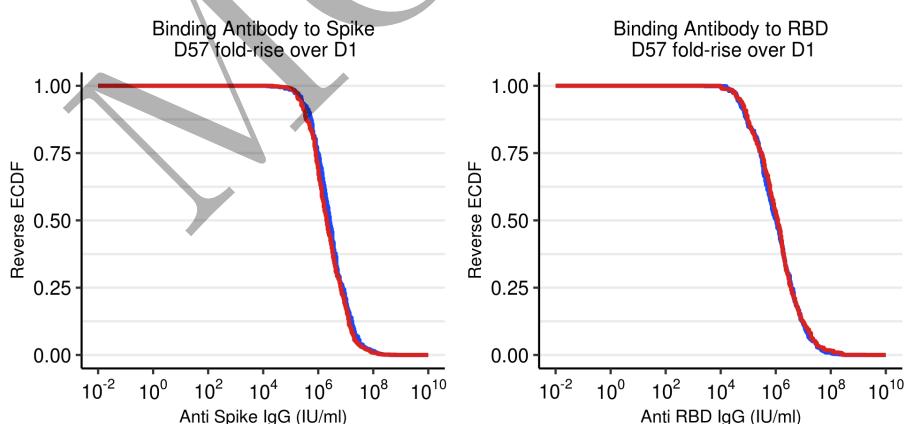


Figure 2.62: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

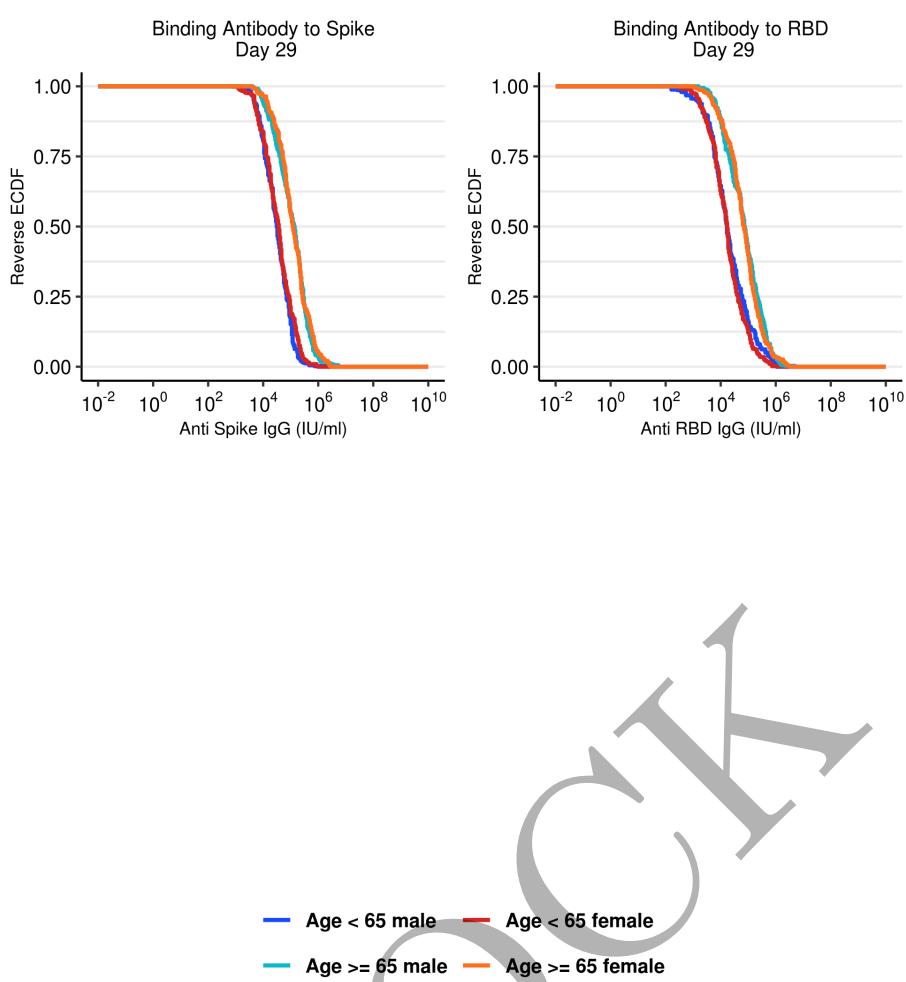


Figure 2.63: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

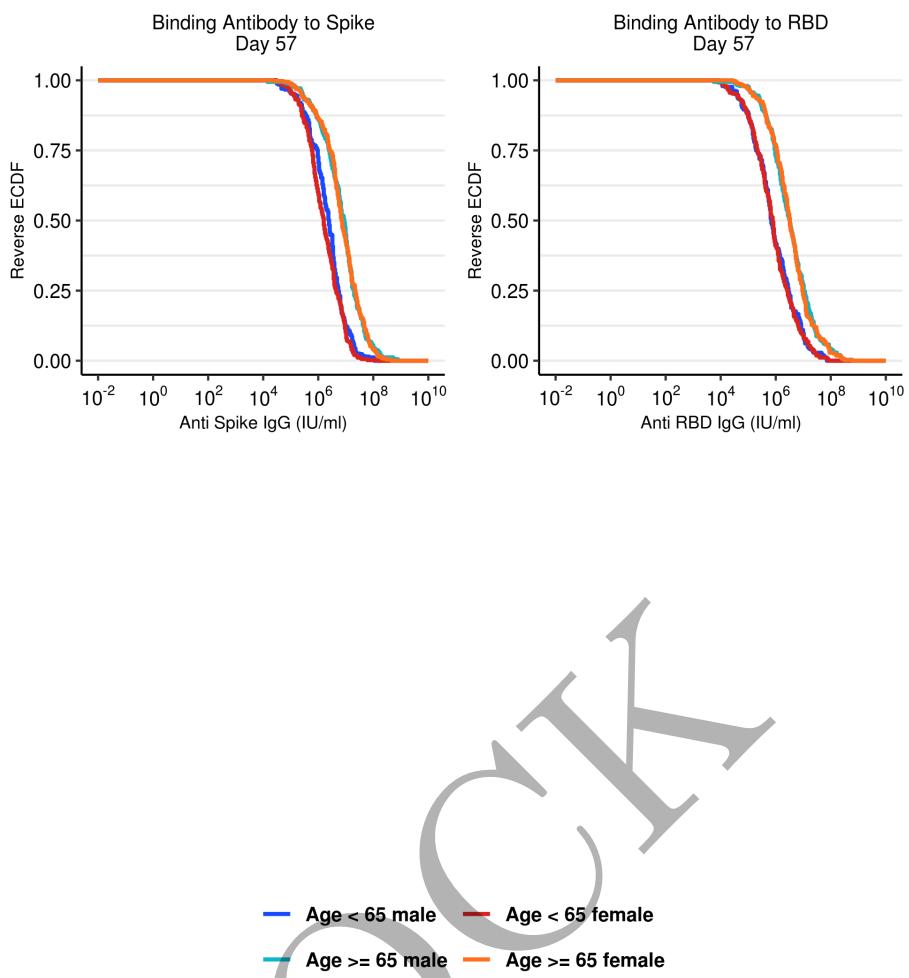


Figure 2.64: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

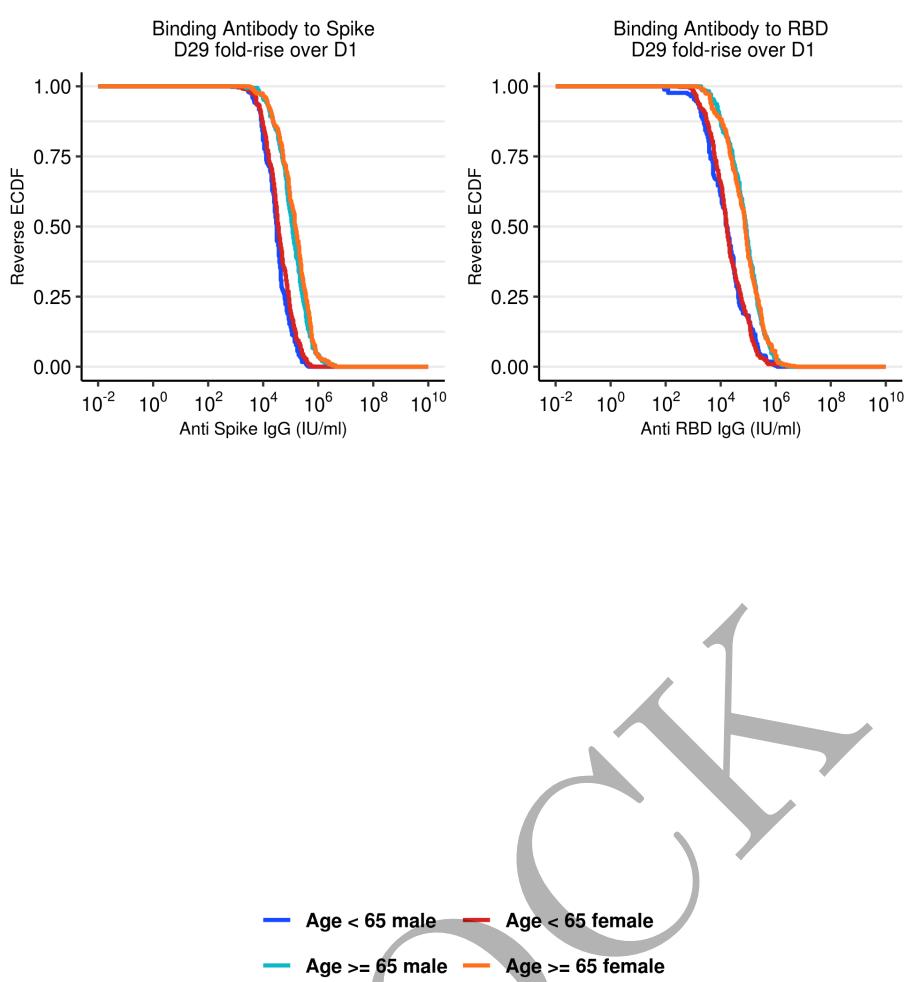


Figure 2.65: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

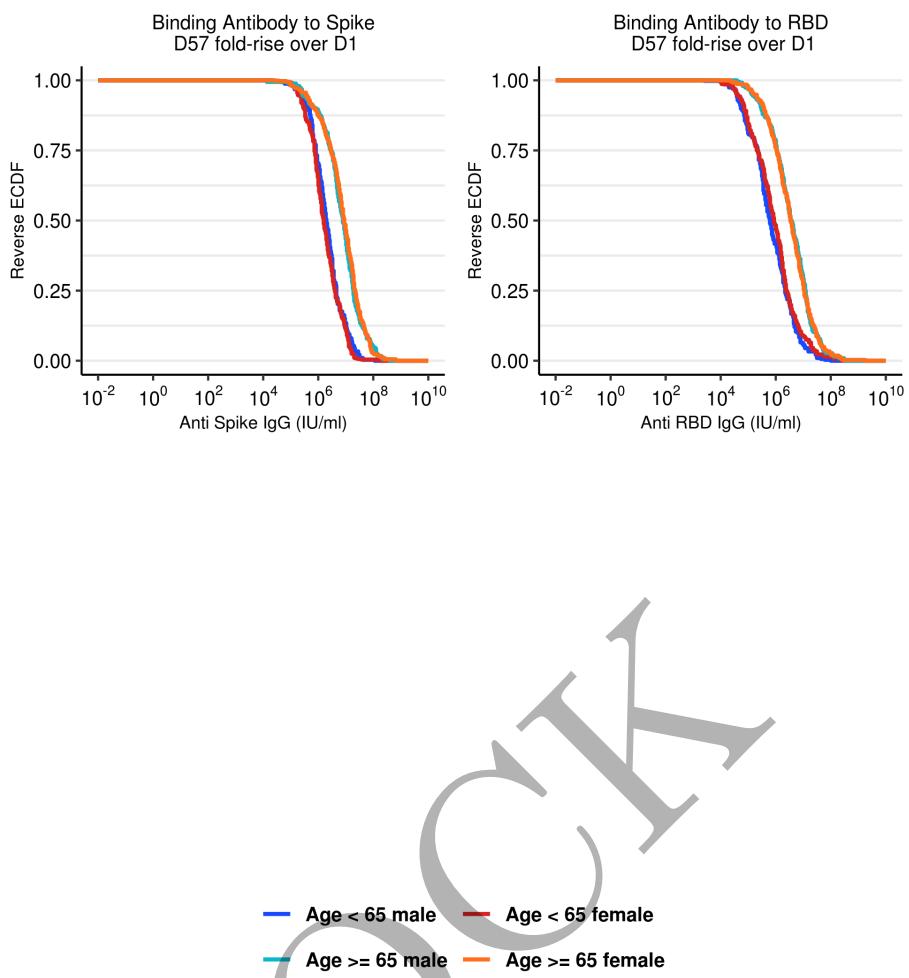


Figure 2.66: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex at birth.

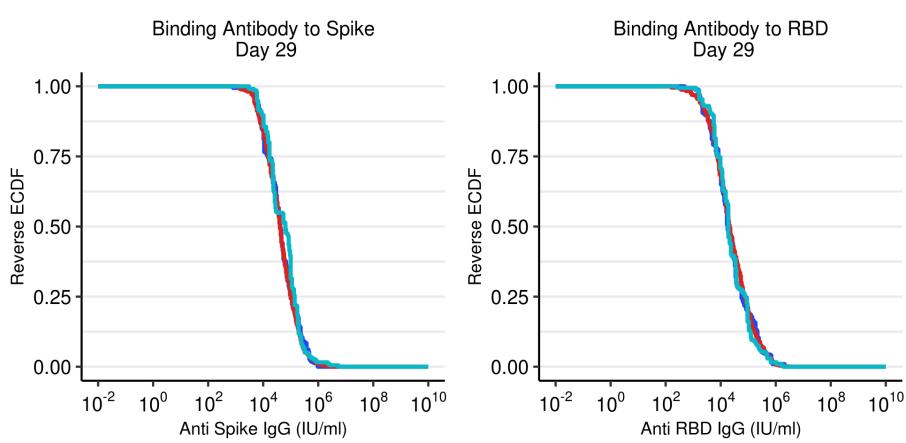


Figure 2.67: RCDF plots for D29 Ab markers: baseline negative vaccine arm by ethnicity.

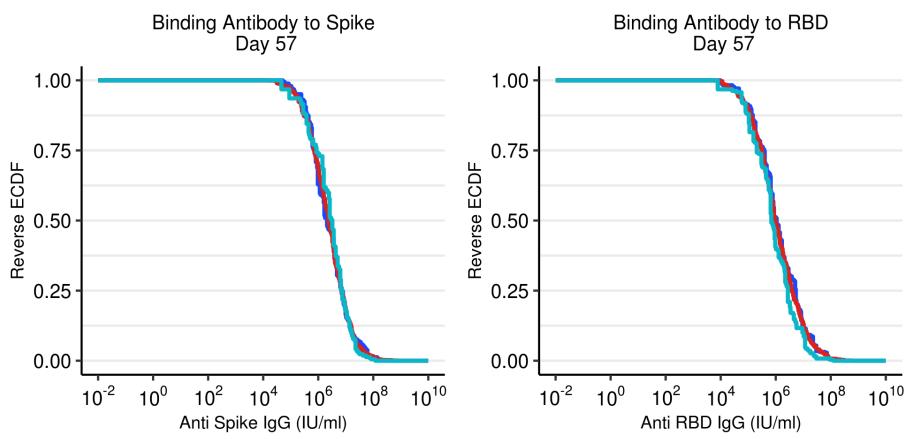


Figure 2.68: RCDF plots for D57 Ab markers: baseline negative vaccine arm by ethnicity.

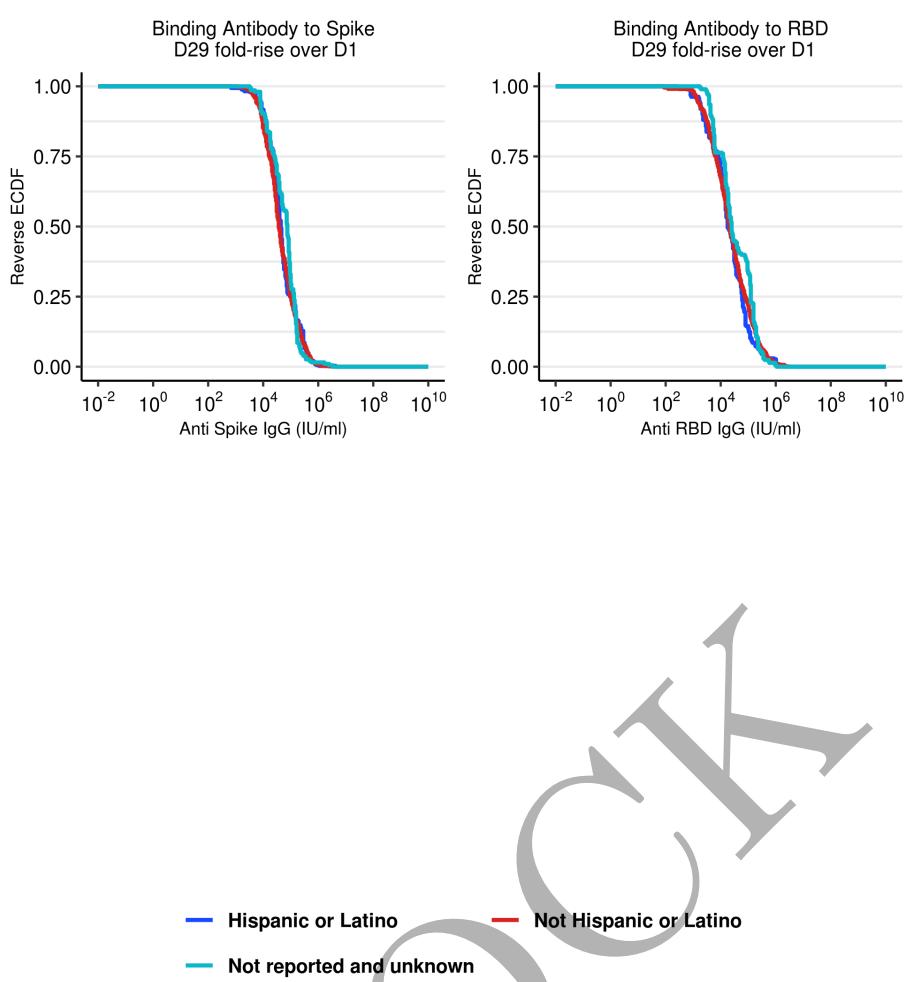


Figure 2.69: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

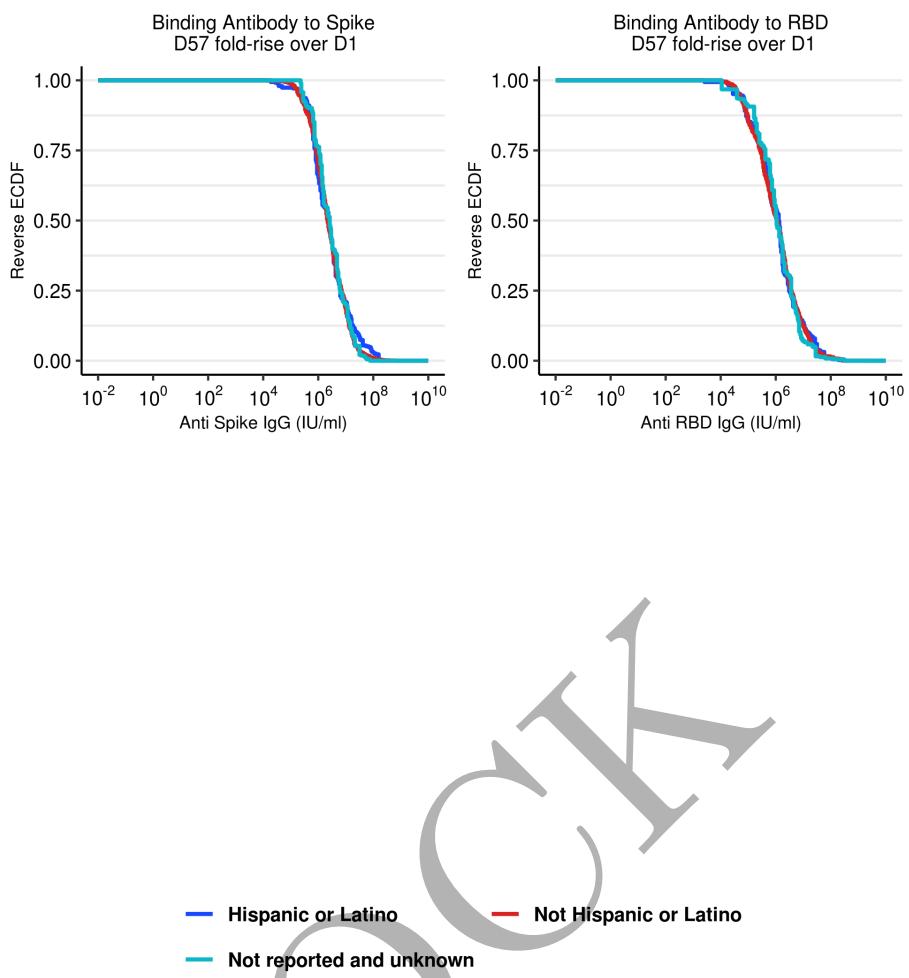


Figure 2.70: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

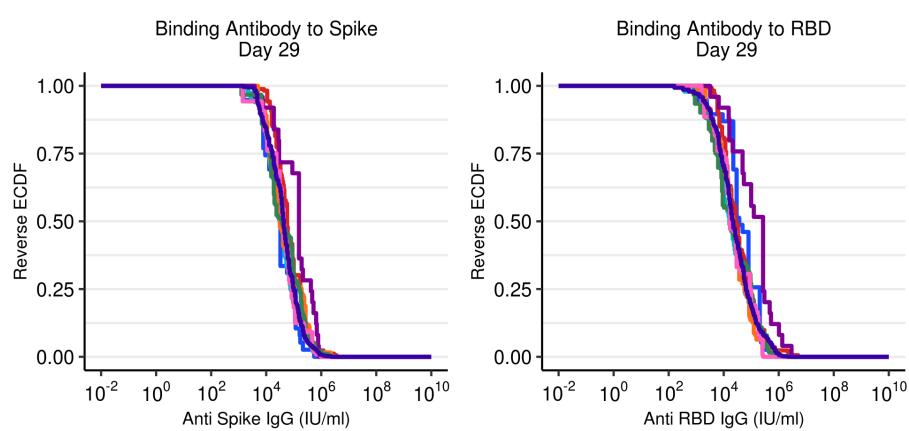
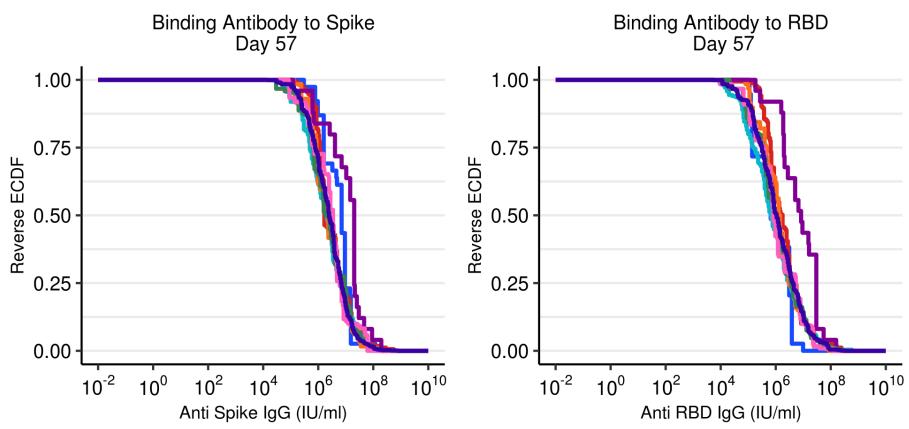


Figure 2.71: RCDF plots for D29 Ab markers: baseline negative vaccine arm by race.



— American Indian or Alaska Native — Black or African American — Native Hawaiian or Other Pacific Islander — Other	— Asian — Multiracial — Not reported and unknown — White
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Figure 2.72: RCDF plots for D57 Ab markers: baseline negative vaccine arm by race.

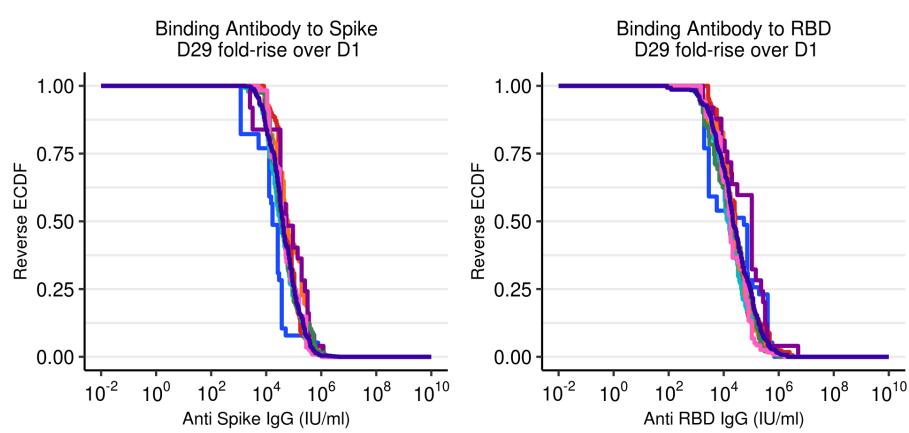


Figure 2.73: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

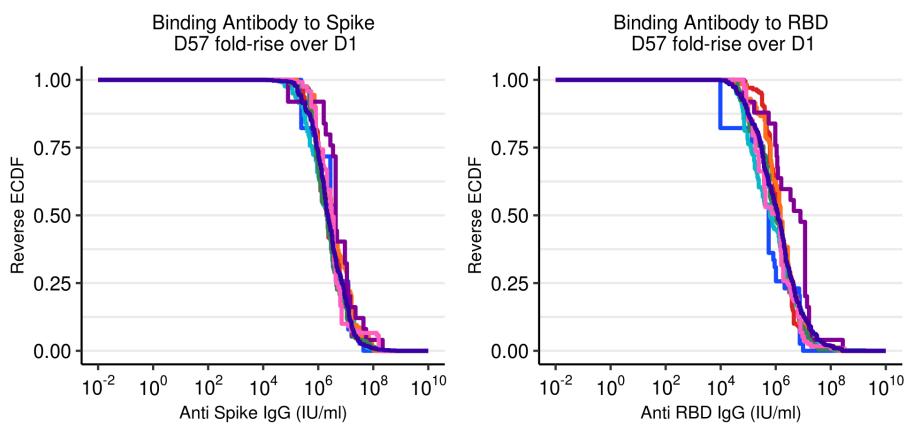


Figure 2.74: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

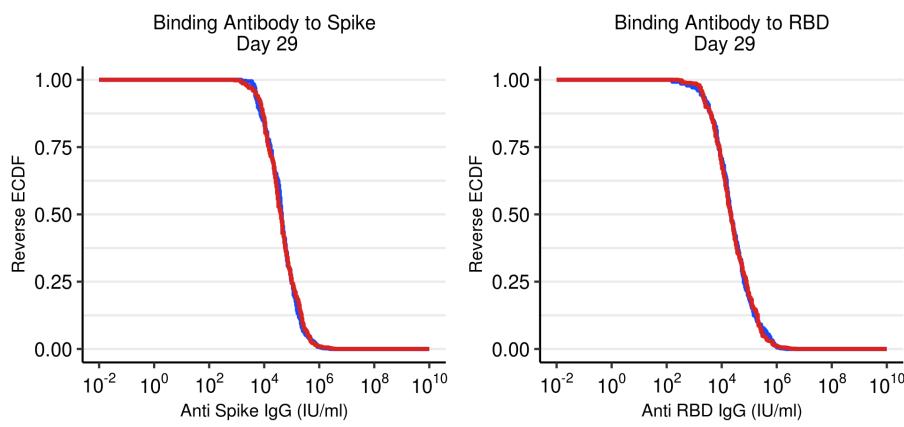


Figure 2.75: RCDF plots for D29 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

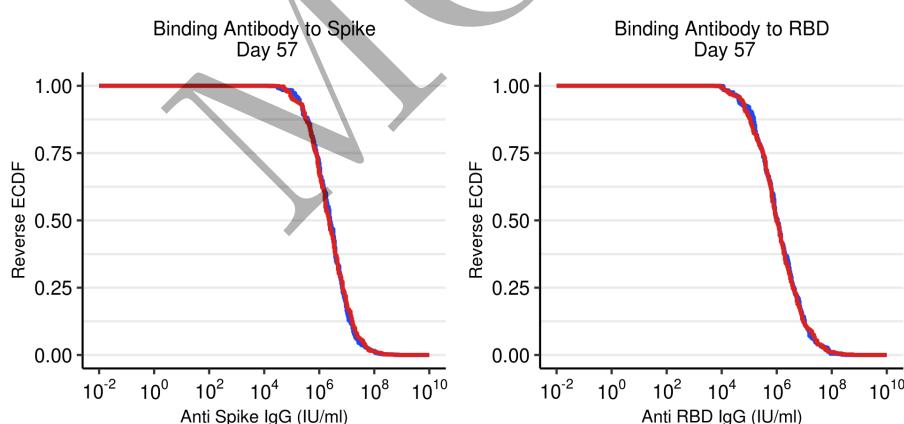


Figure 2.76: RCDF plots for D57 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

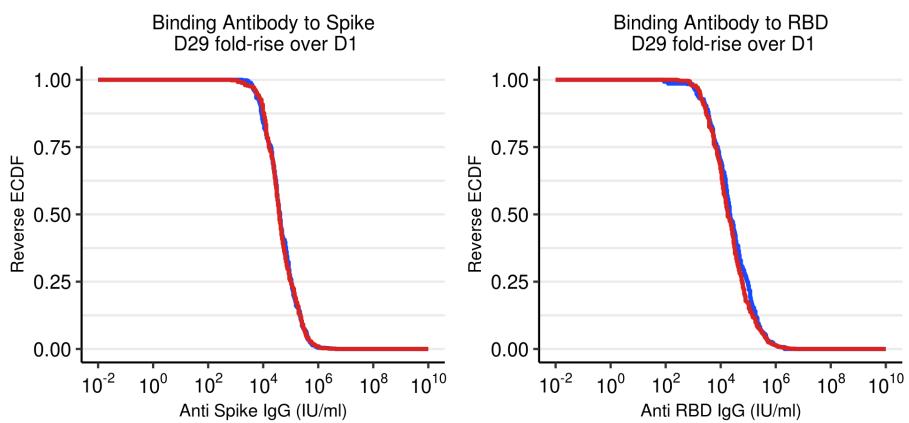


Figure 2.77: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

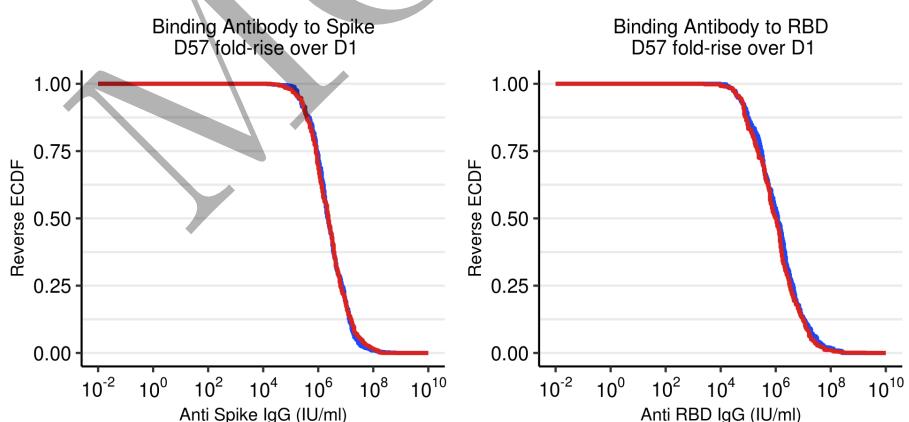


Figure 2.78: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

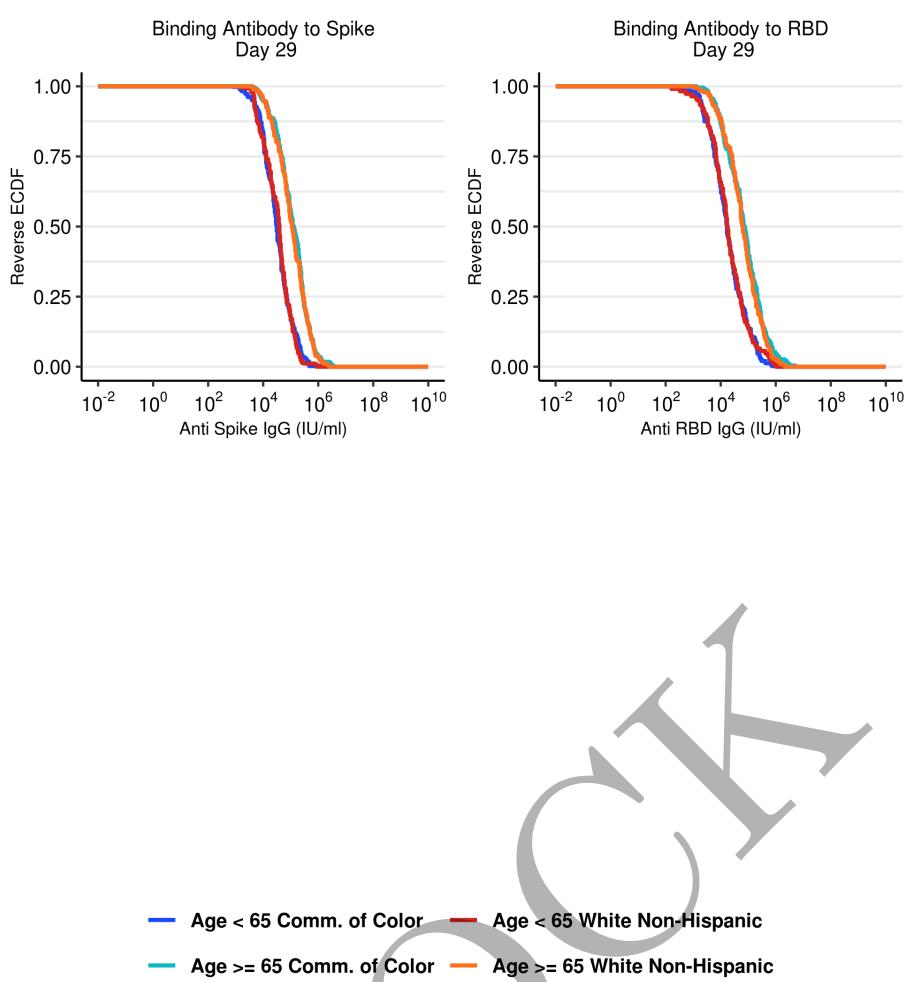


Figure 2.79: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

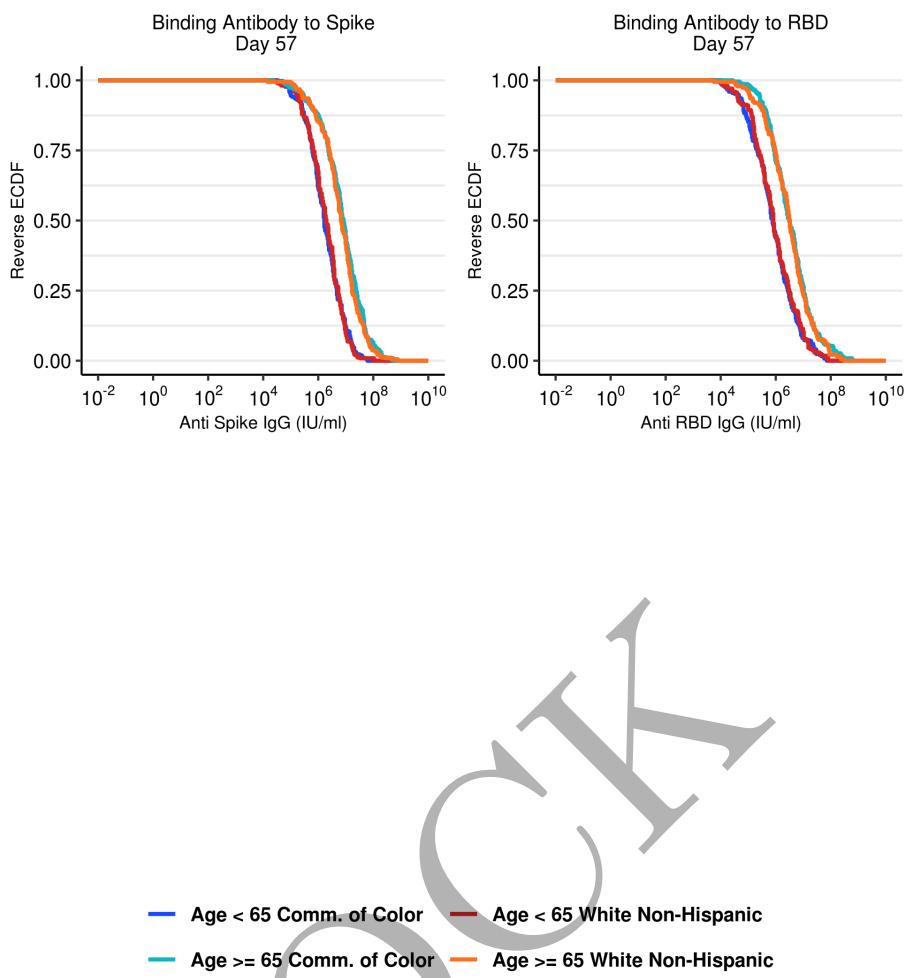


Figure 2.80: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

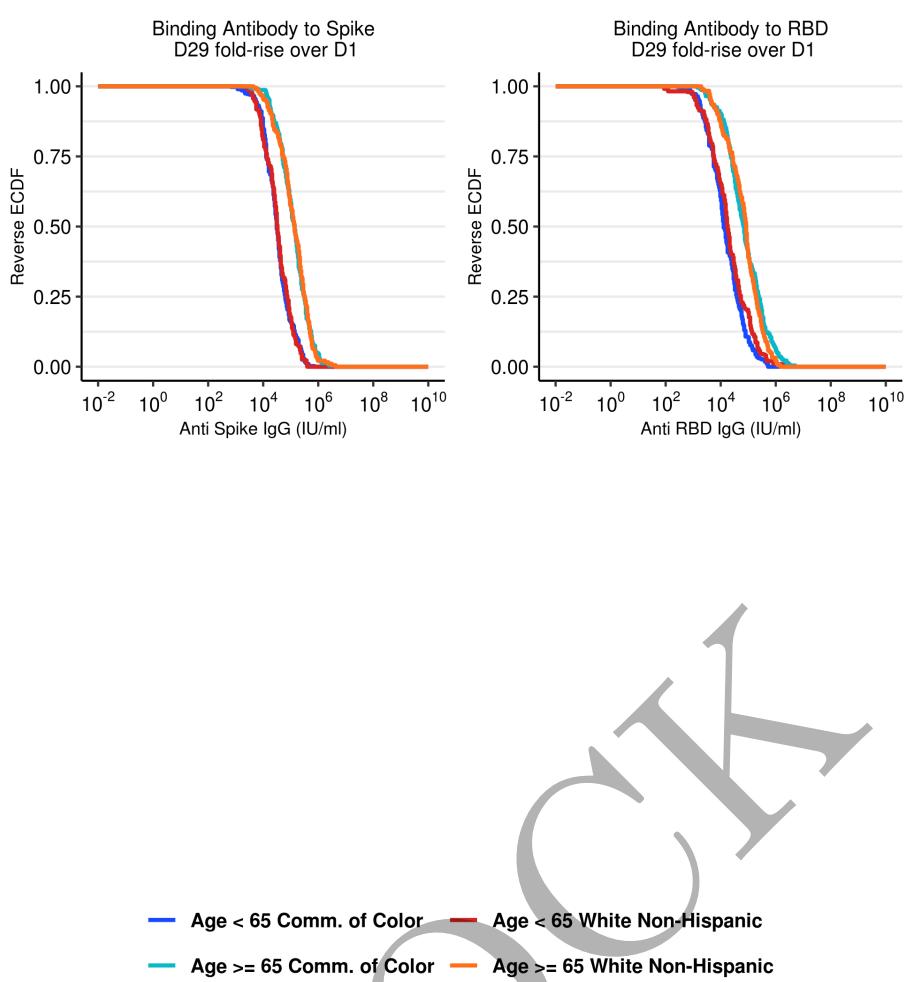


Figure 2.81: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

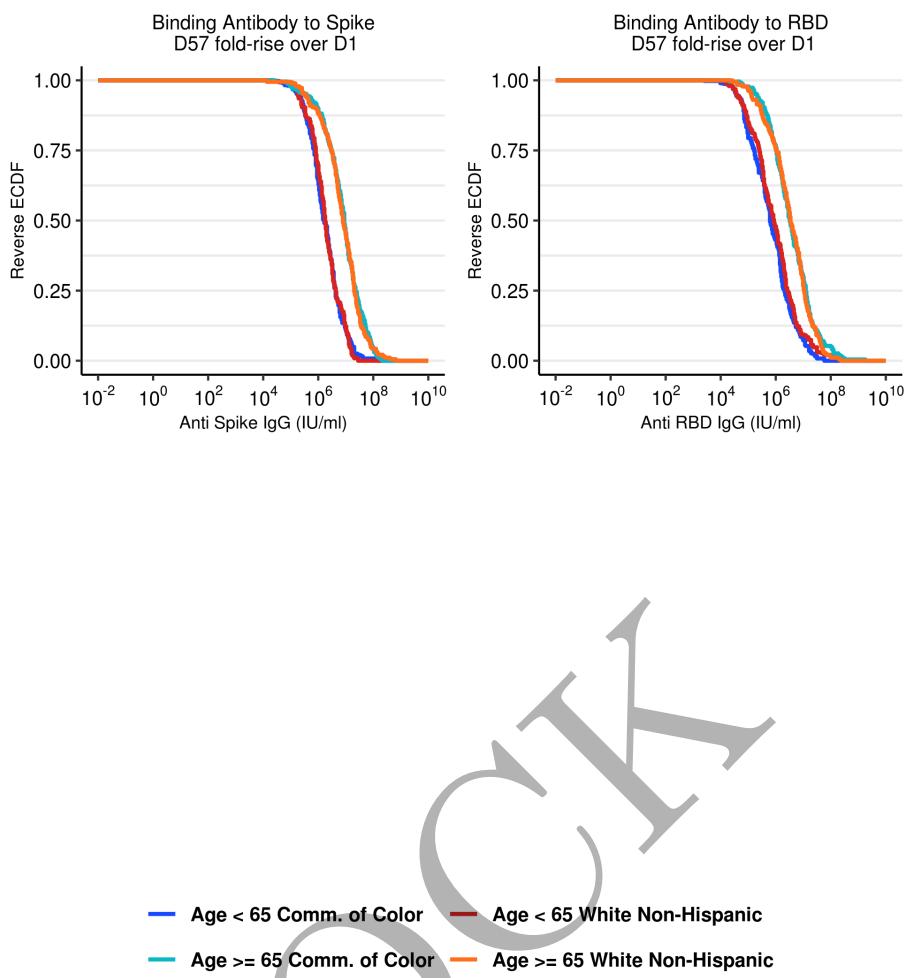


Figure 2.82: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

2.6.2 Baseline SARS-CoV-2 positive

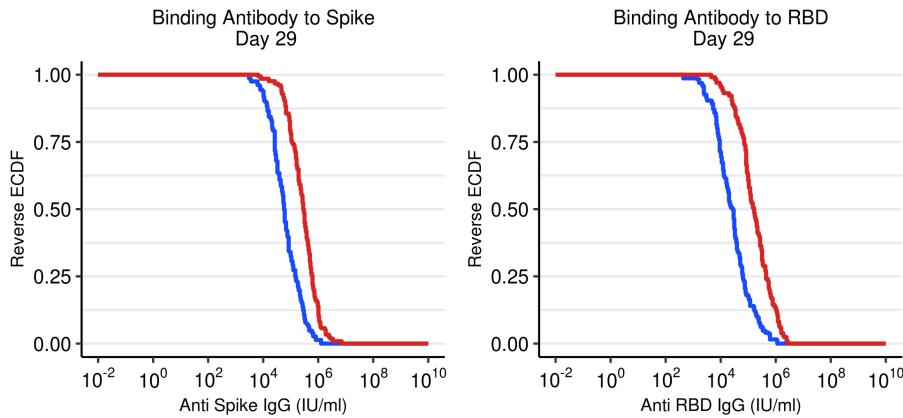


Figure 2.83: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age groups.

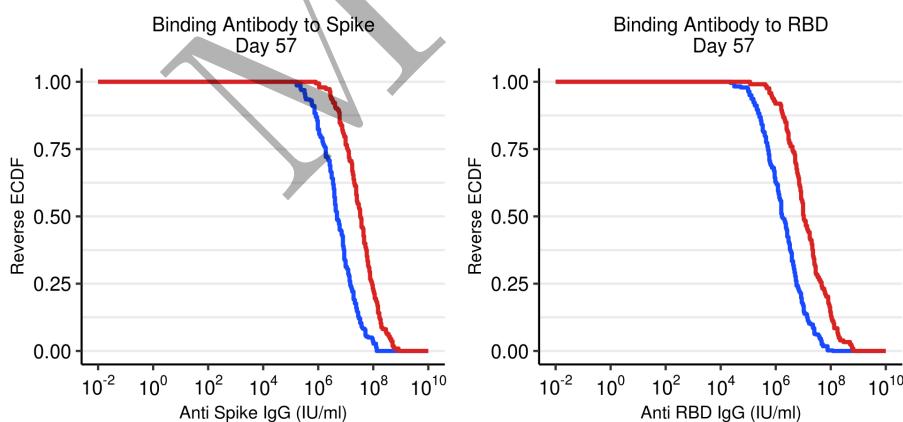


Figure 2.84: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age groups.

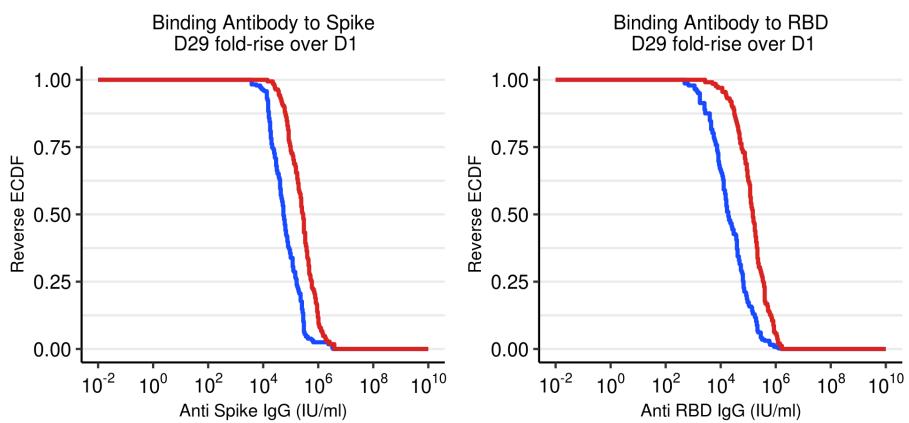


Figure 2.85: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

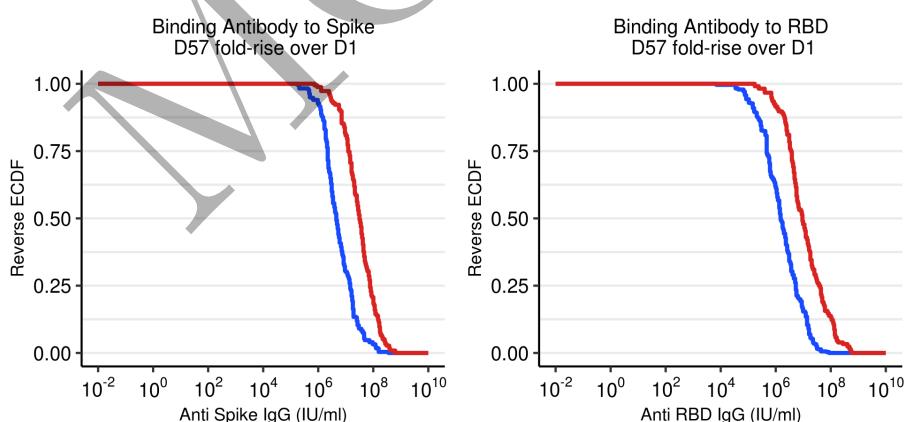


Figure 2.86: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

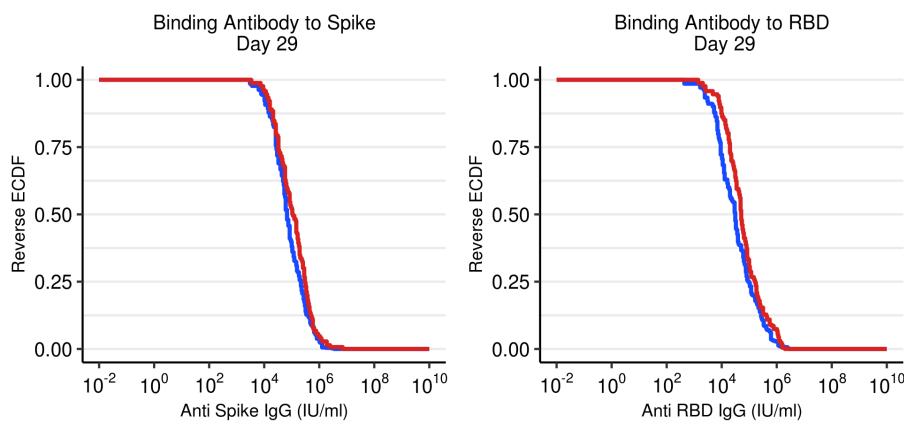


Figure 2.87: RCDF plots for D29 Ab markers: baseline positive vaccine arm by high-risk condition.

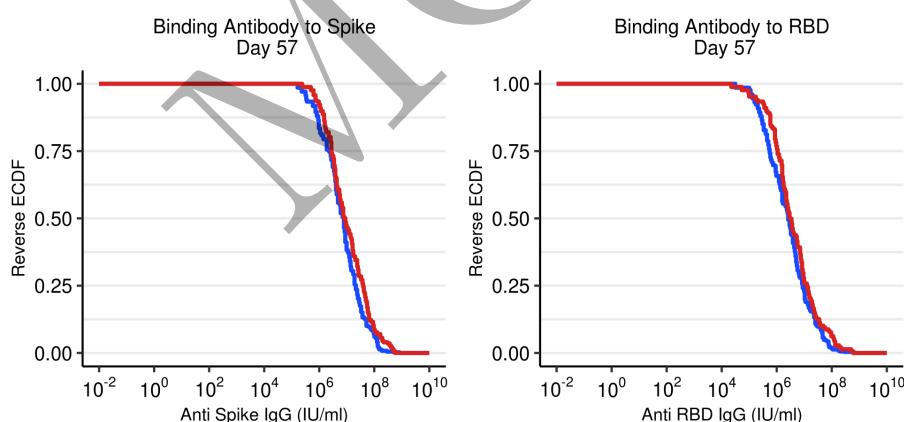


Figure 2.88: RCDF plots for D57 Ab markers: baseline positive vaccine arm by high-risk condition.

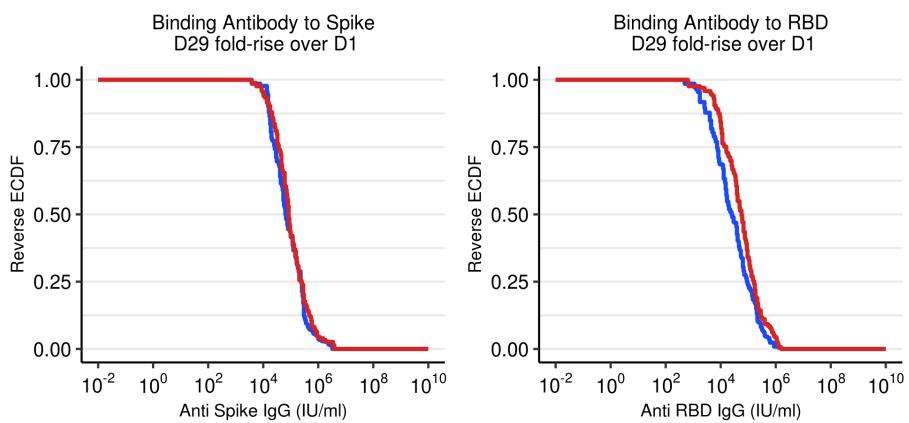


Figure 2.89: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

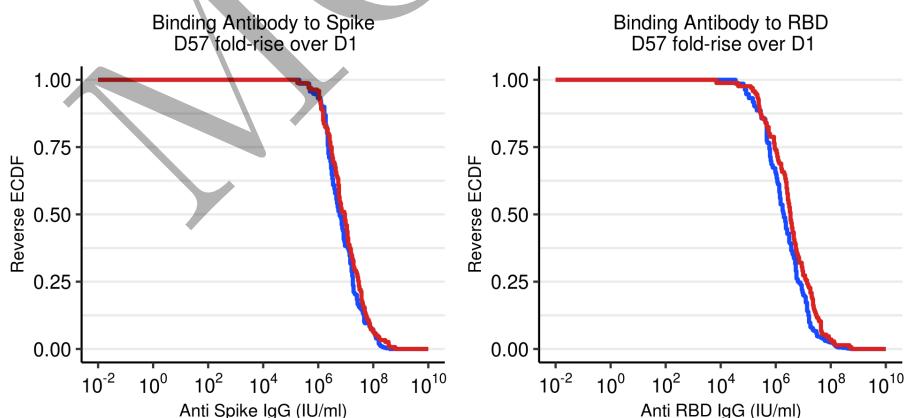


Figure 2.90: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

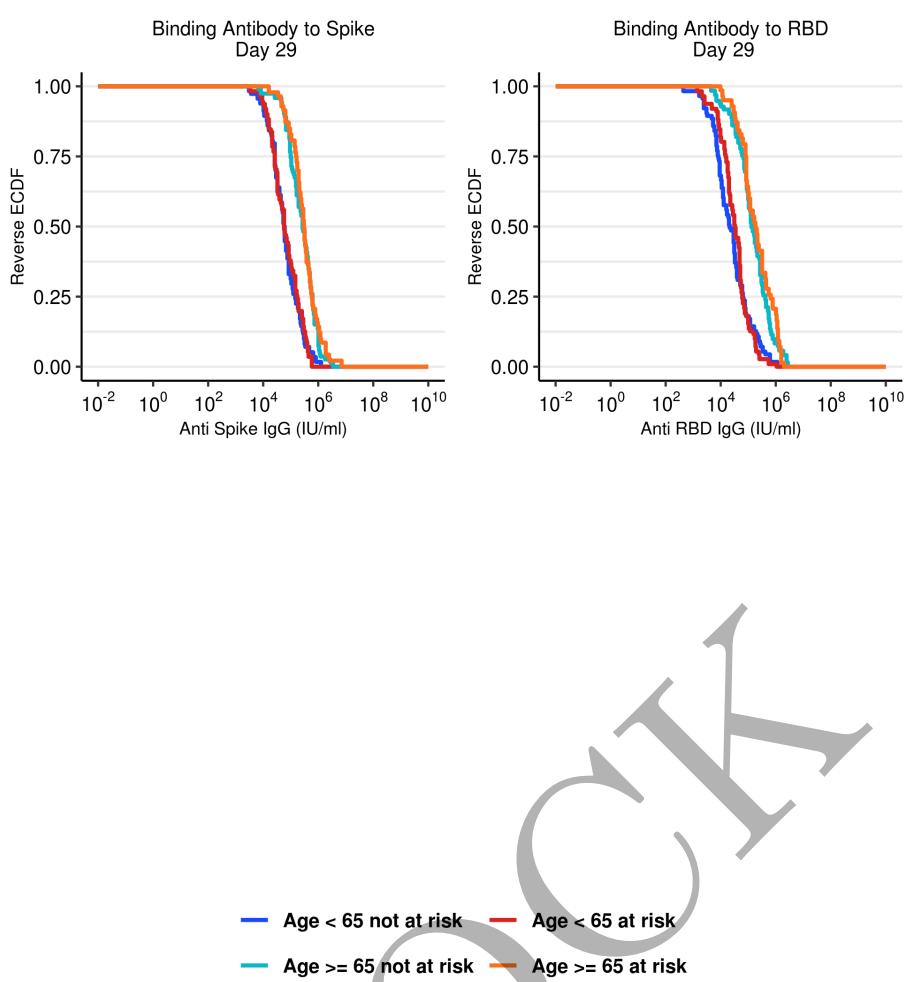


Figure 2.91: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and high-risk condition.

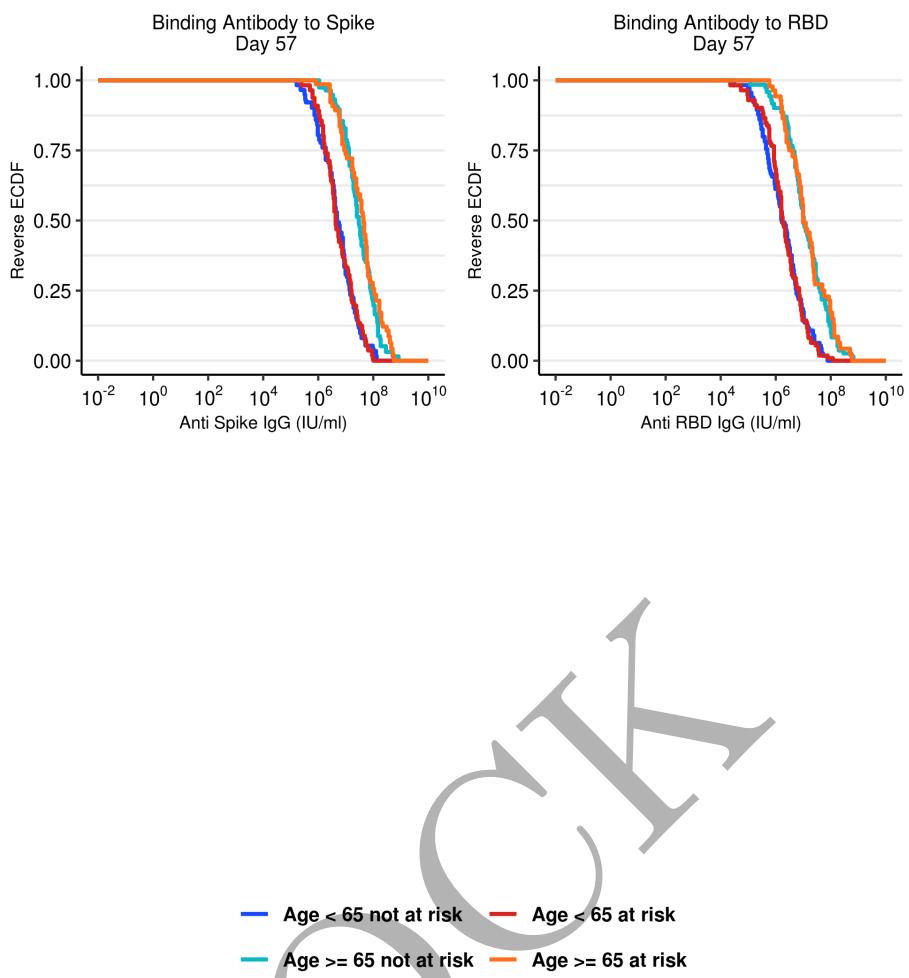


Figure 2.92: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and high-risk condition.

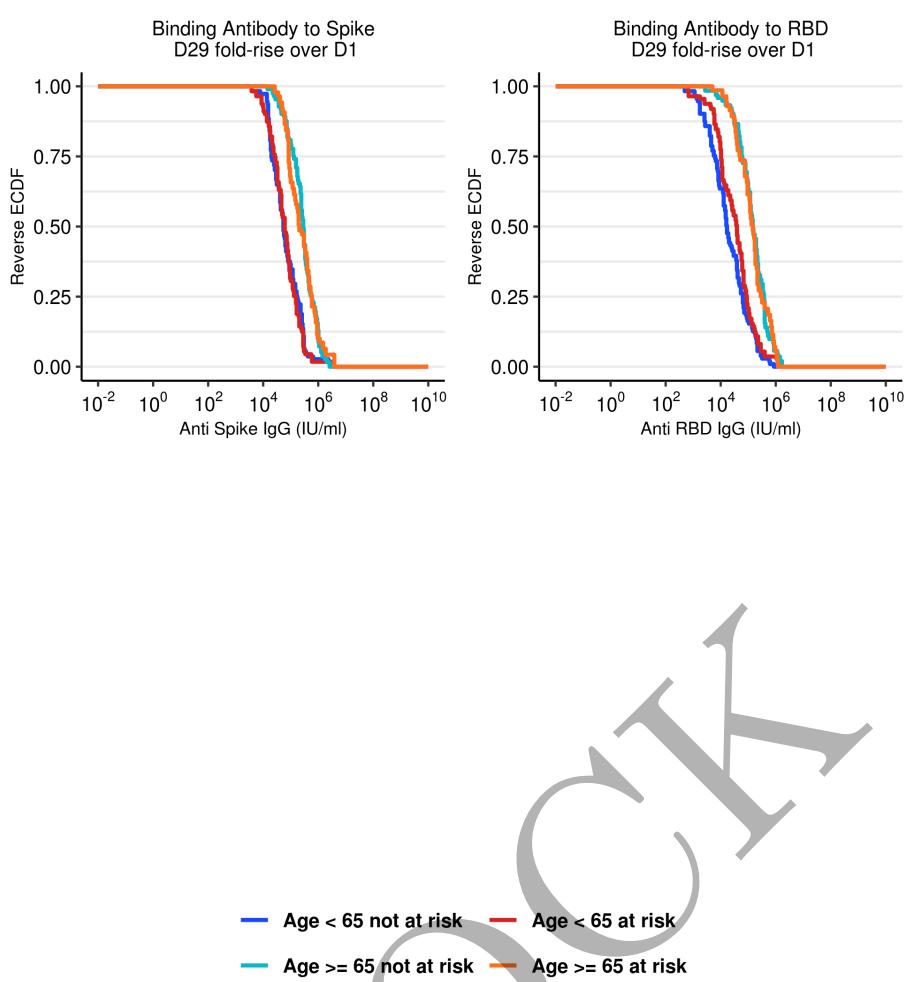


Figure 2.93: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

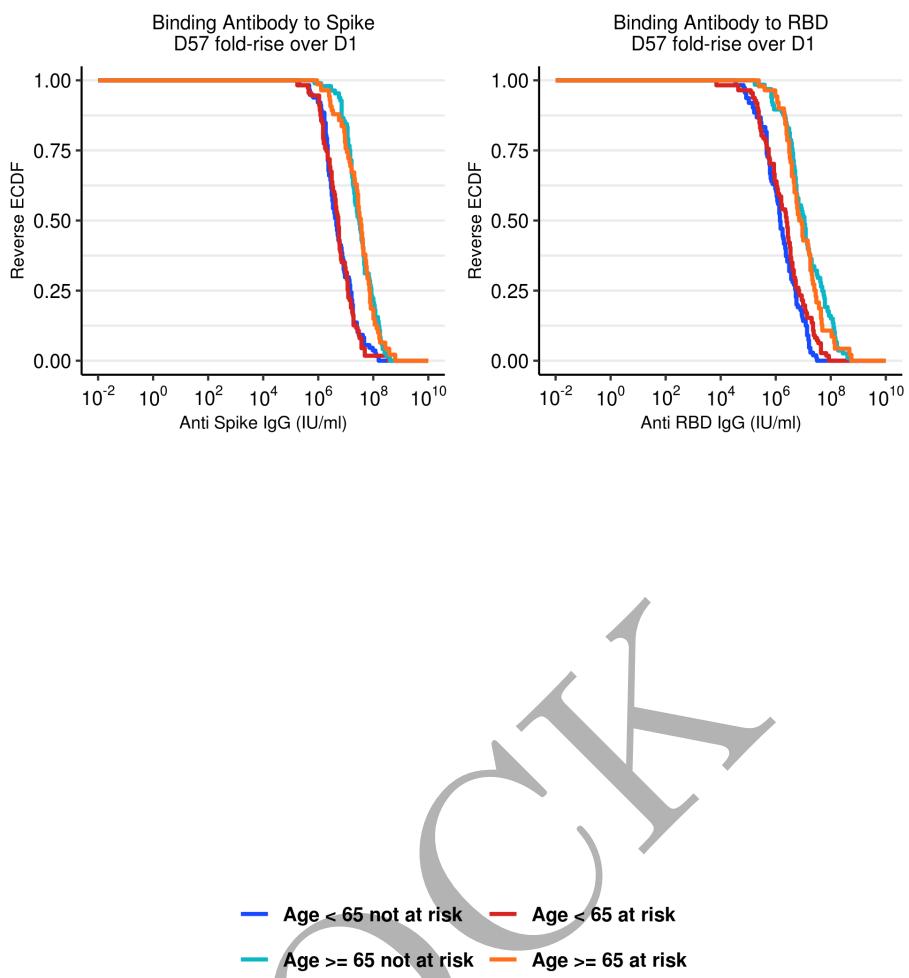


Figure 2.94: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

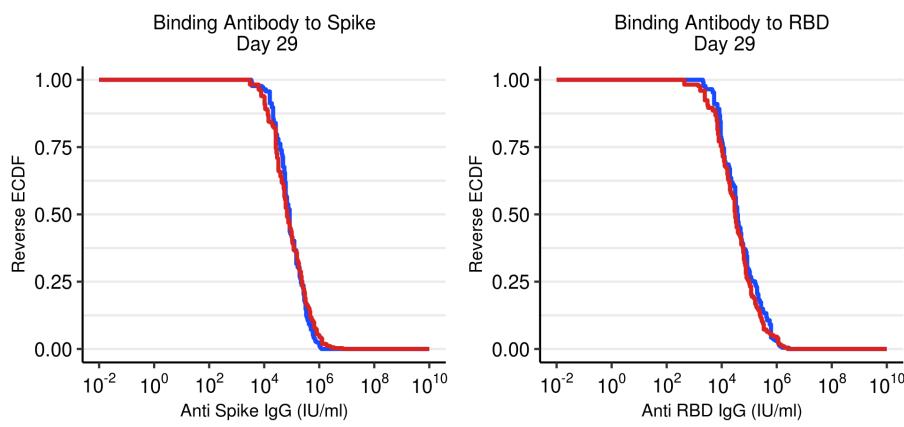


Figure 2.95: RCDF plots for D29 Ab markers: baseline positive vaccine arm by sex assigned at birth.

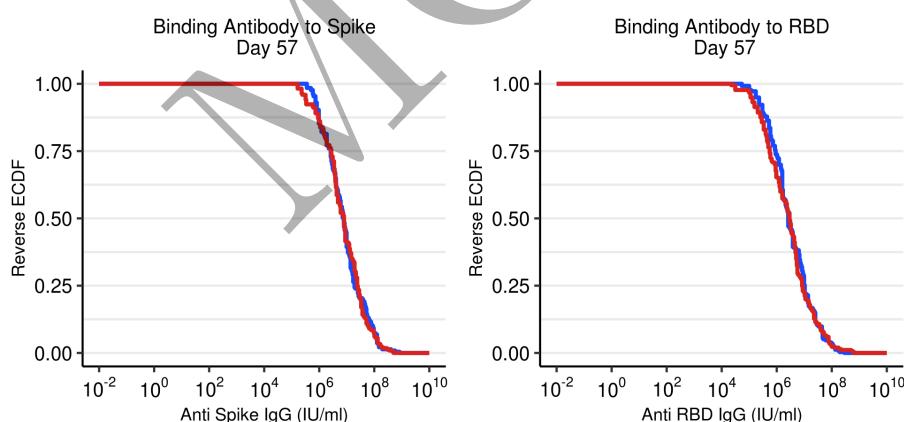


Figure 2.96: RCDF plots for D57 Ab markers: baseline positive vaccine arm by sex assigned at birth.

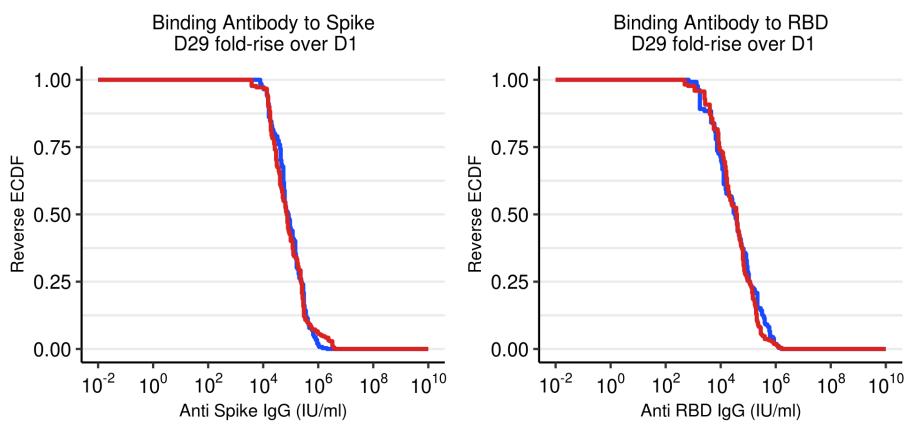


Figure 2.97: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

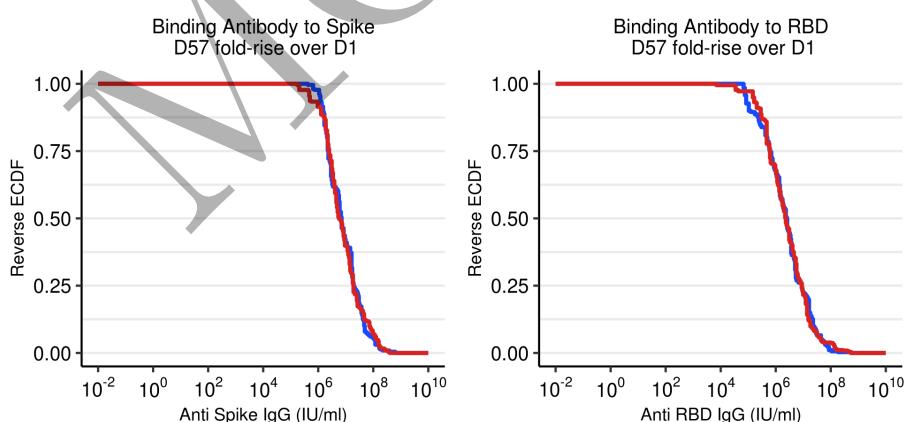


Figure 2.98: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

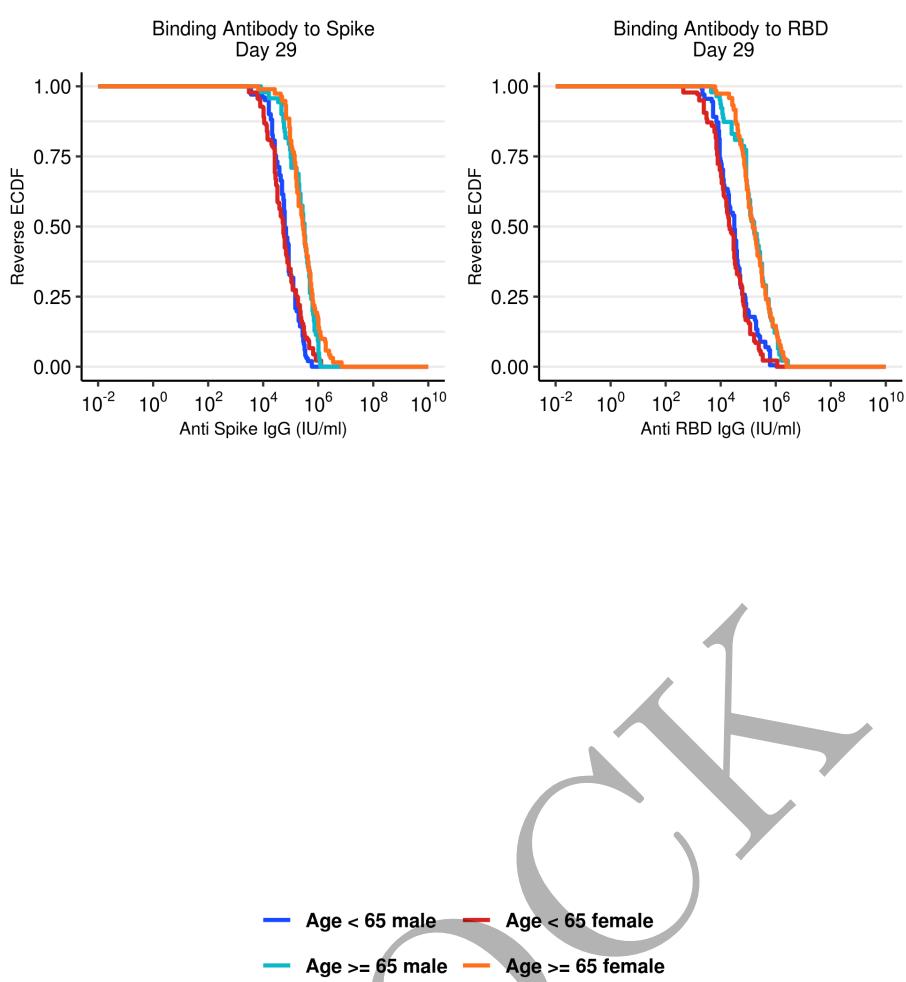


Figure 2.99: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

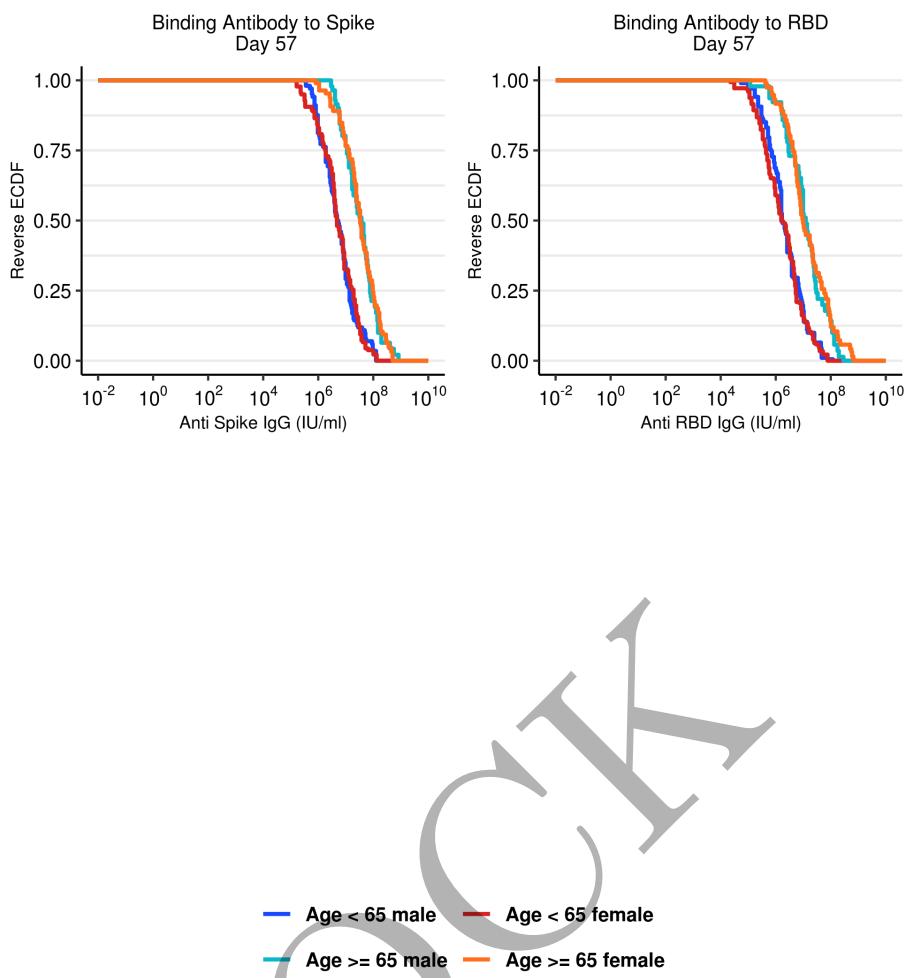


Figure 2.100: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

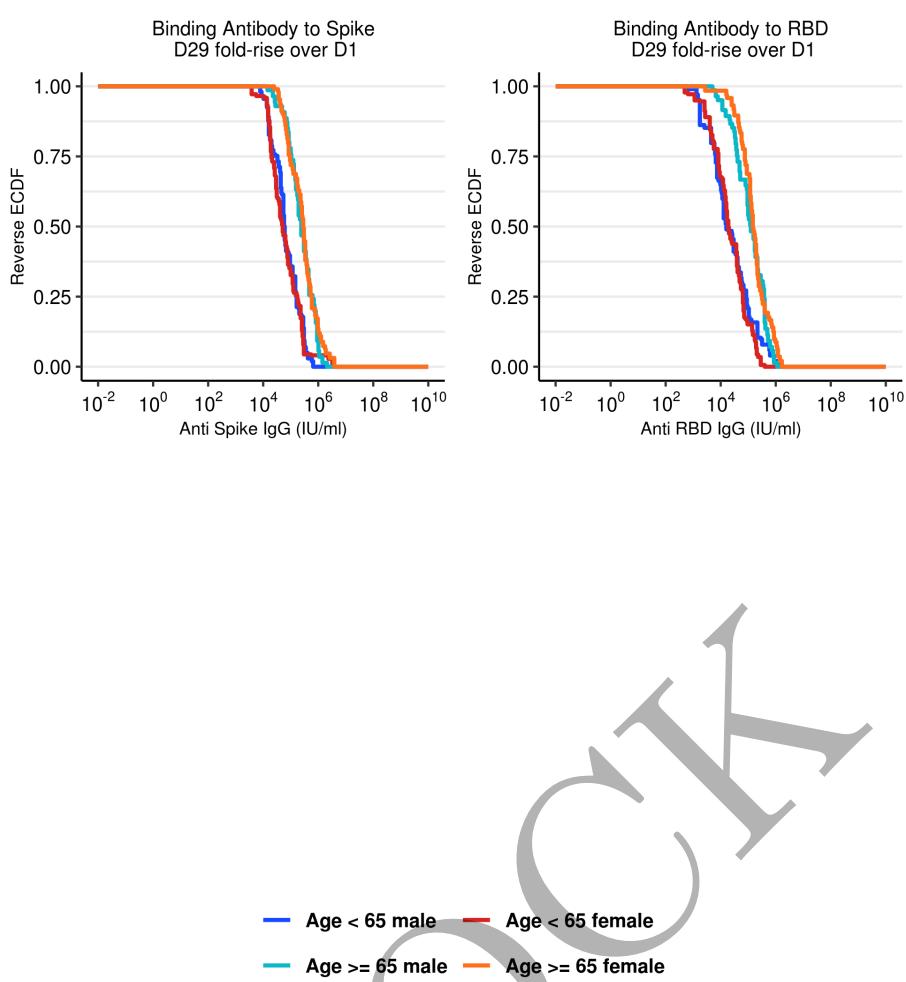


Figure 2.101: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

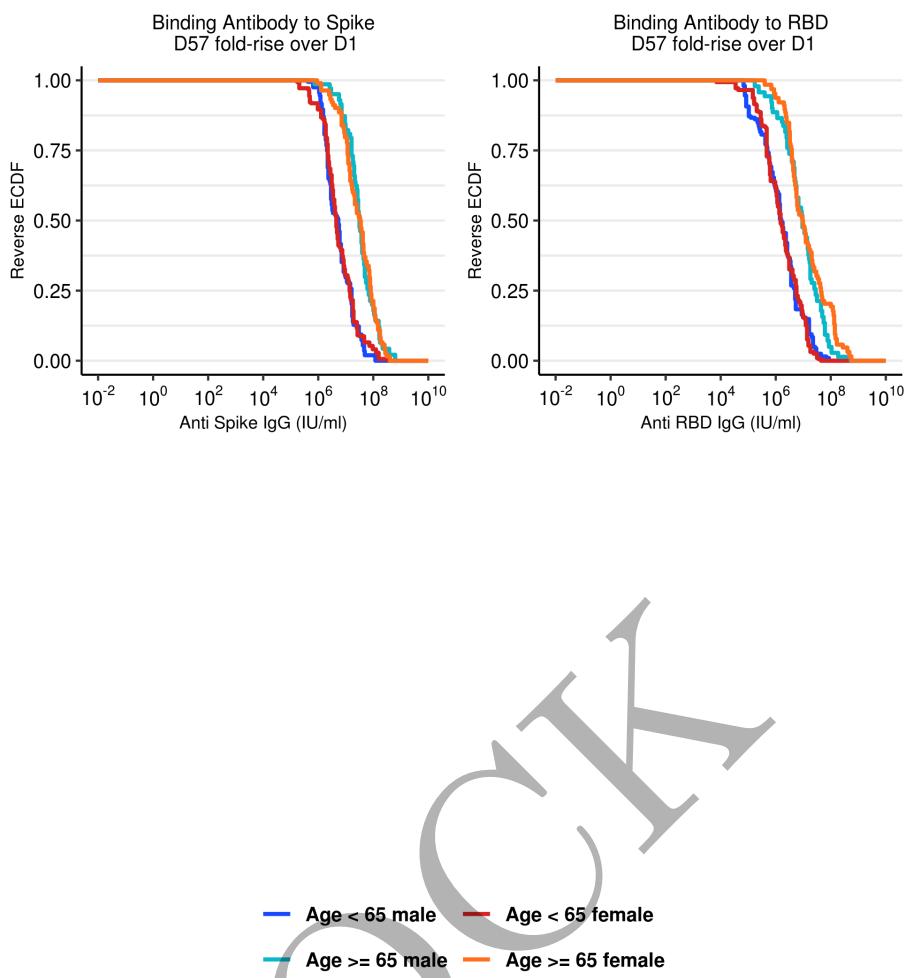


Figure 2.102: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

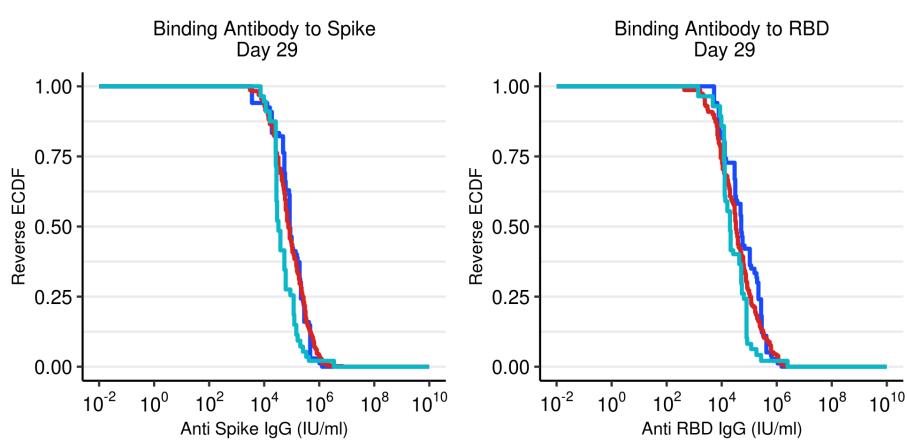


Figure 2.103: RCDF plots for D29 Ab markers: baseline positive vaccine arm by ethnicity.

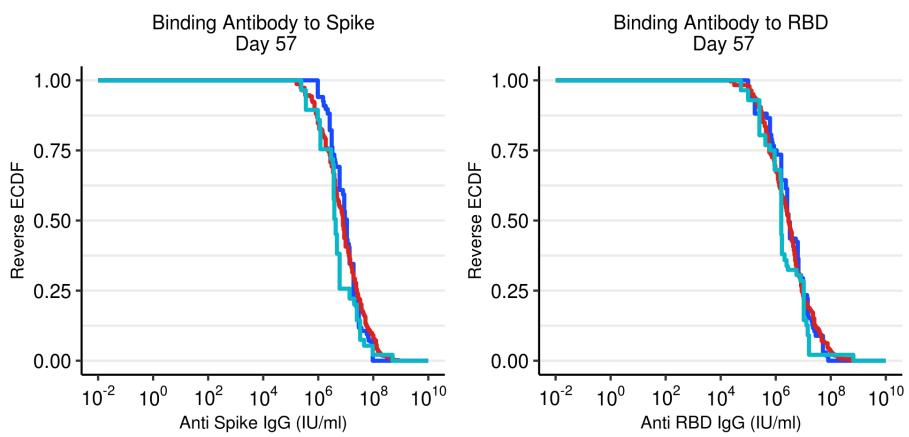


Figure 2.104: RCDF plots for D57 Ab markers: baseline positive vaccine arm by ethnicity.

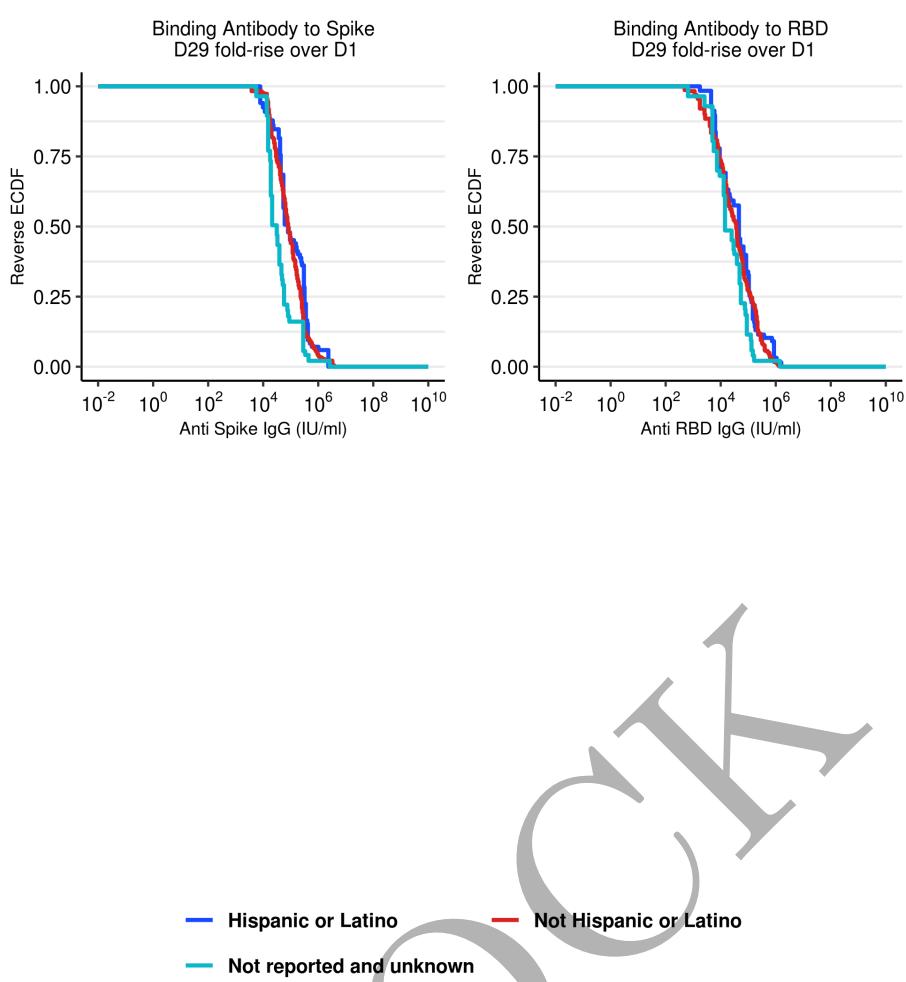


Figure 2.105: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

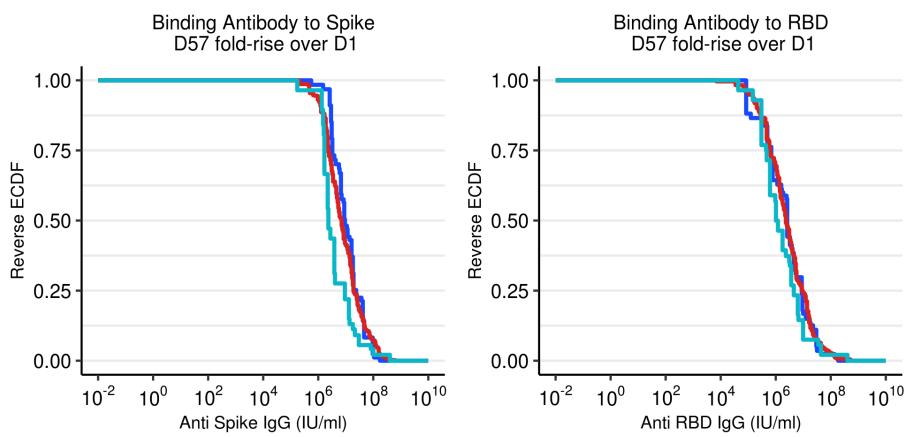
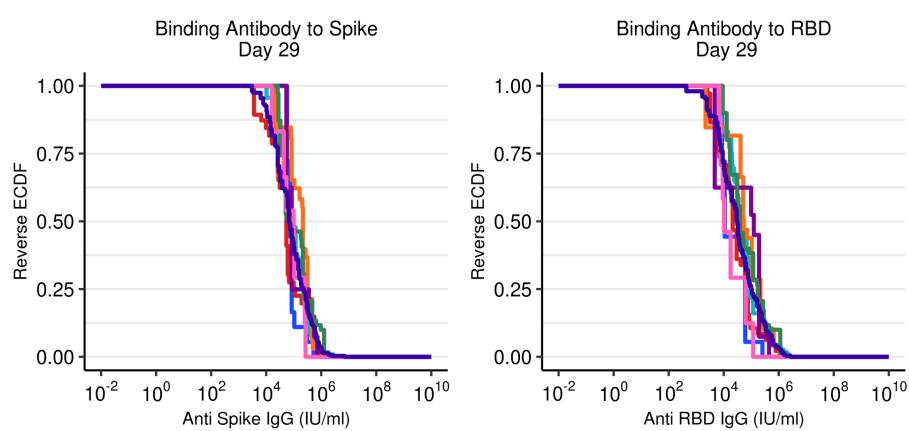
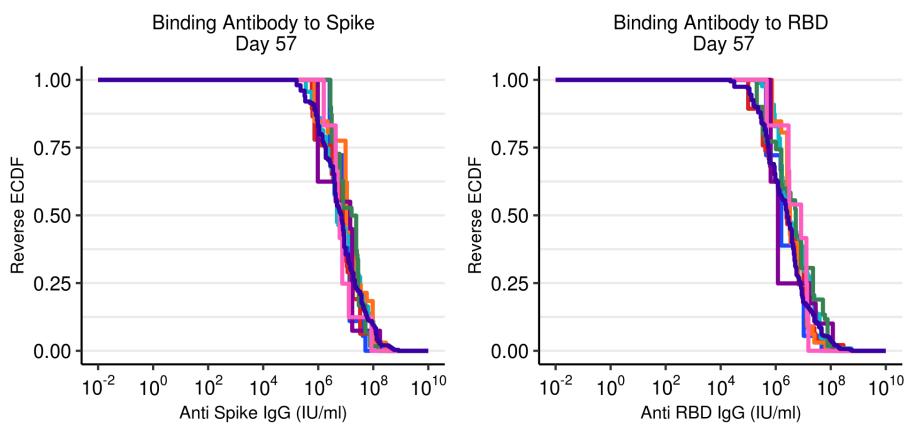


Figure 2.106: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.



— American Indian or Alaska Native
 — Black or African American
 — Native Hawaiian or Other Pacific Islander
 — Other
 — Asian
 — Multiracial
 — Not reported and unknown
 — White

Figure 2.107: RCDF plots for D29 Ab markers: baseline positive vaccine arm by race.



— American Indian or Alaska Native
— Black or African American
— Native Hawaiian or Other Pacific Islander
— Other
— Not reported and unknown
— Multiracial
— White

Figure 2.108: RCDF plots for D57 Ab markers: baseline positive vaccine arm by race.

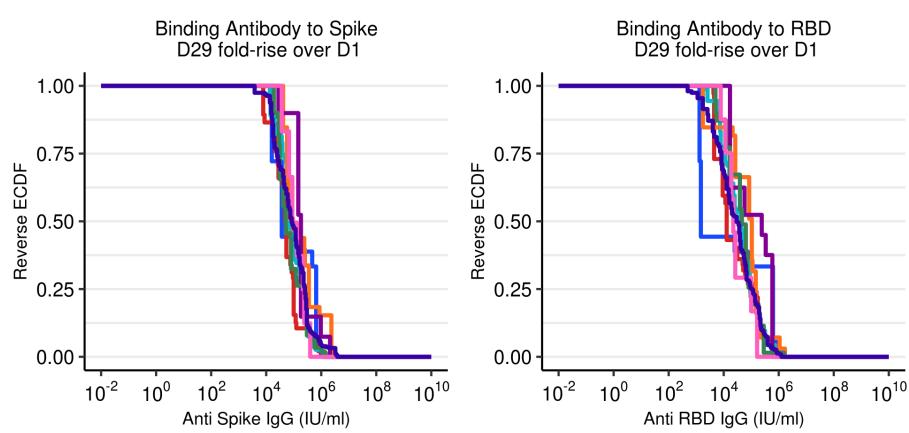
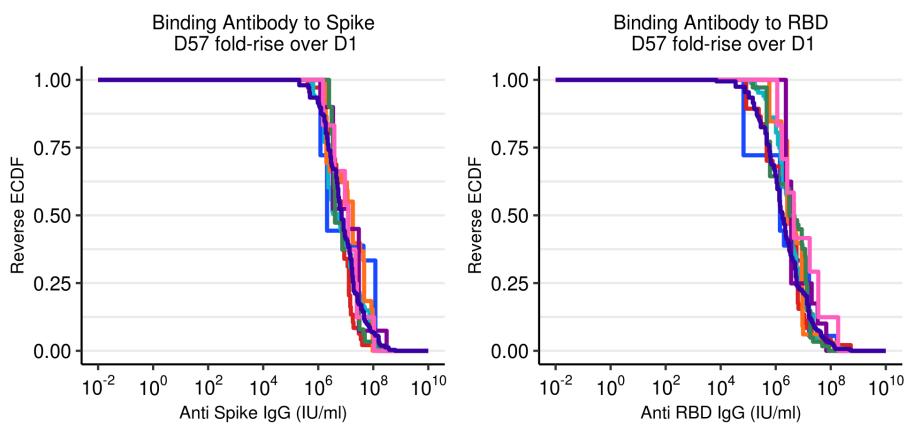


Figure 2.109: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.



— American Indian or Alaska Native — Black or African American — Native Hawaiian or Other Pacific Islander — Other	— Asian — Multiracial — Not reported and unknown — White
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Figure 2.110: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

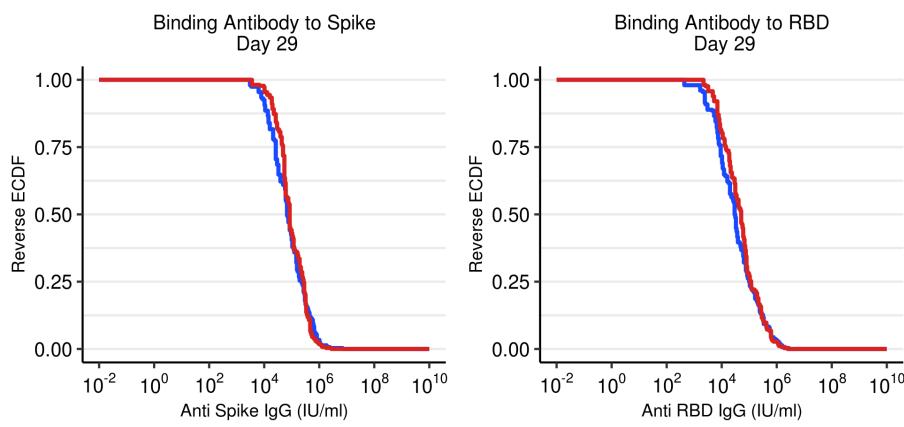


Figure 2.111: RCDF plots for D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

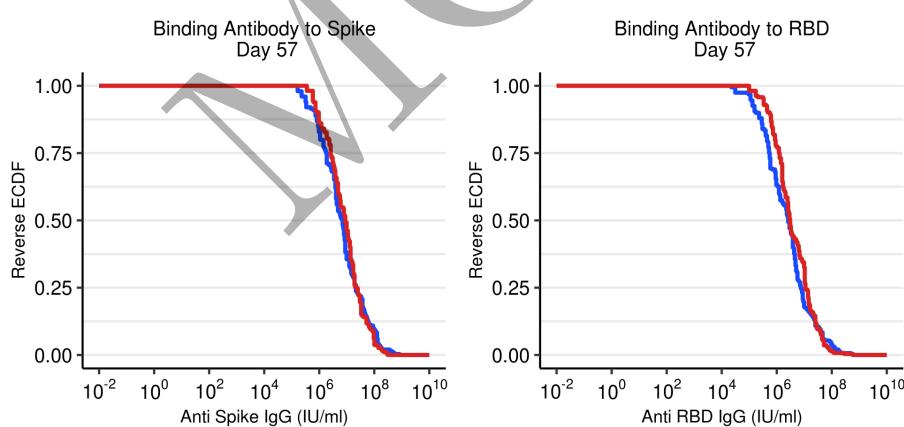


Figure 2.112: RCDF plots for D57 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

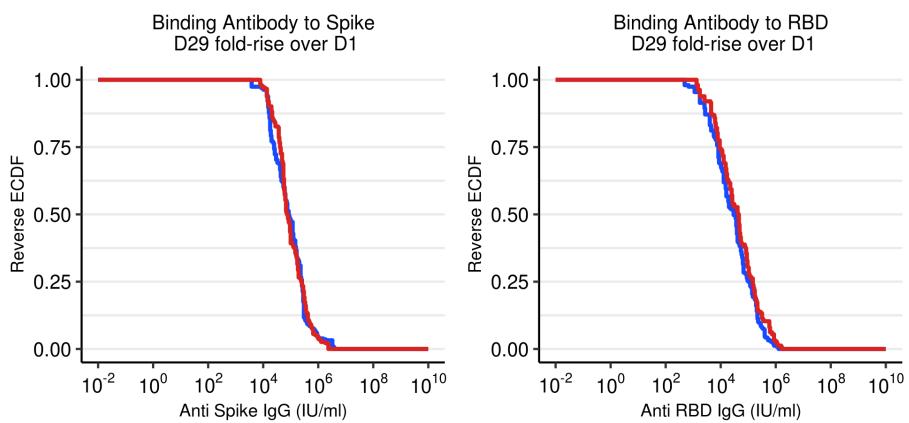


Figure 2.113: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

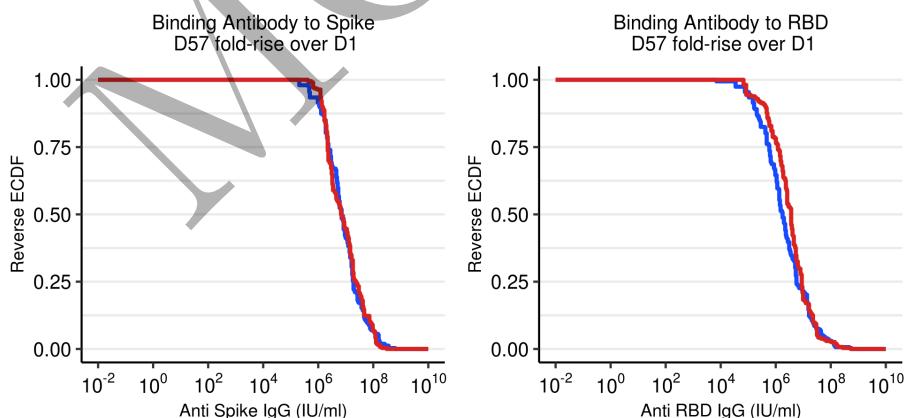


Figure 2.114: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

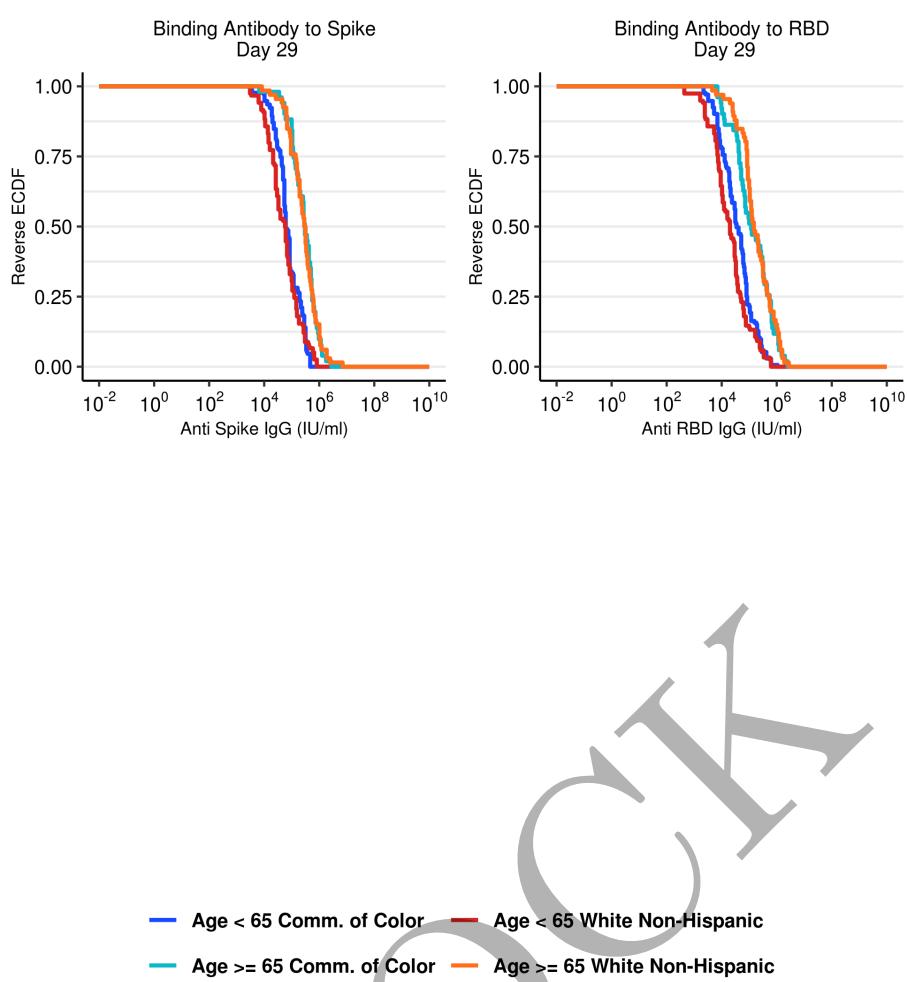


Figure 2.115: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

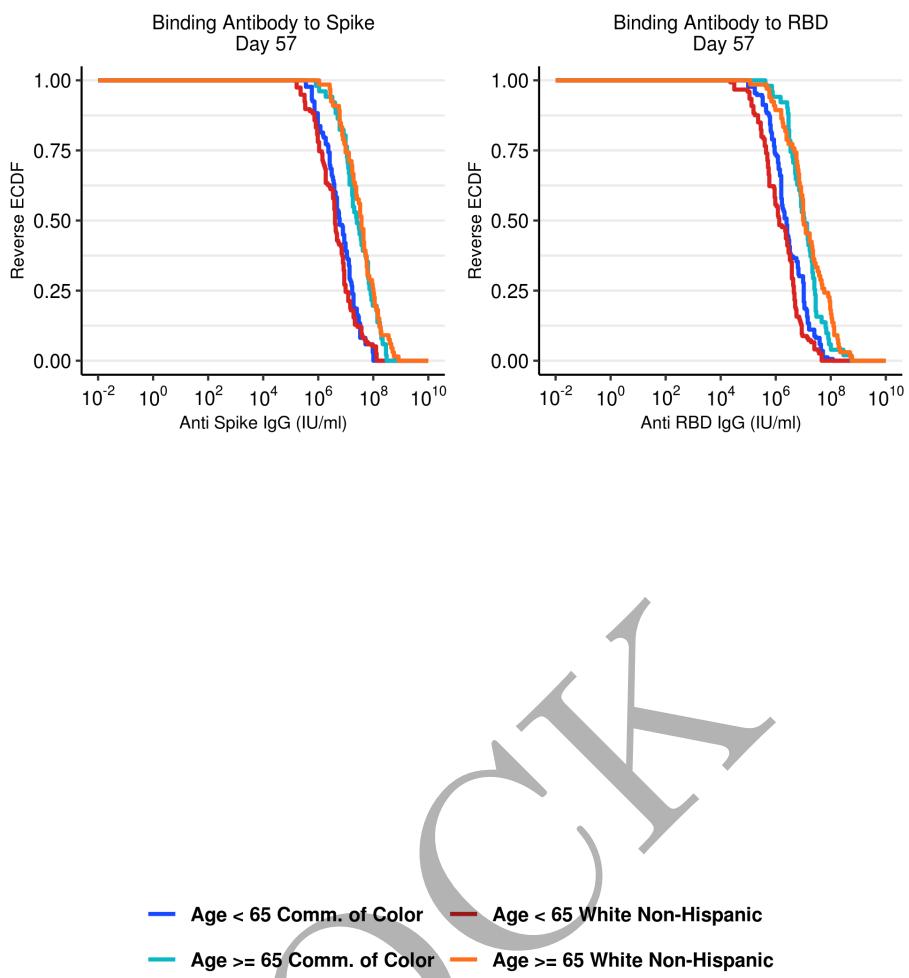


Figure 2.116: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

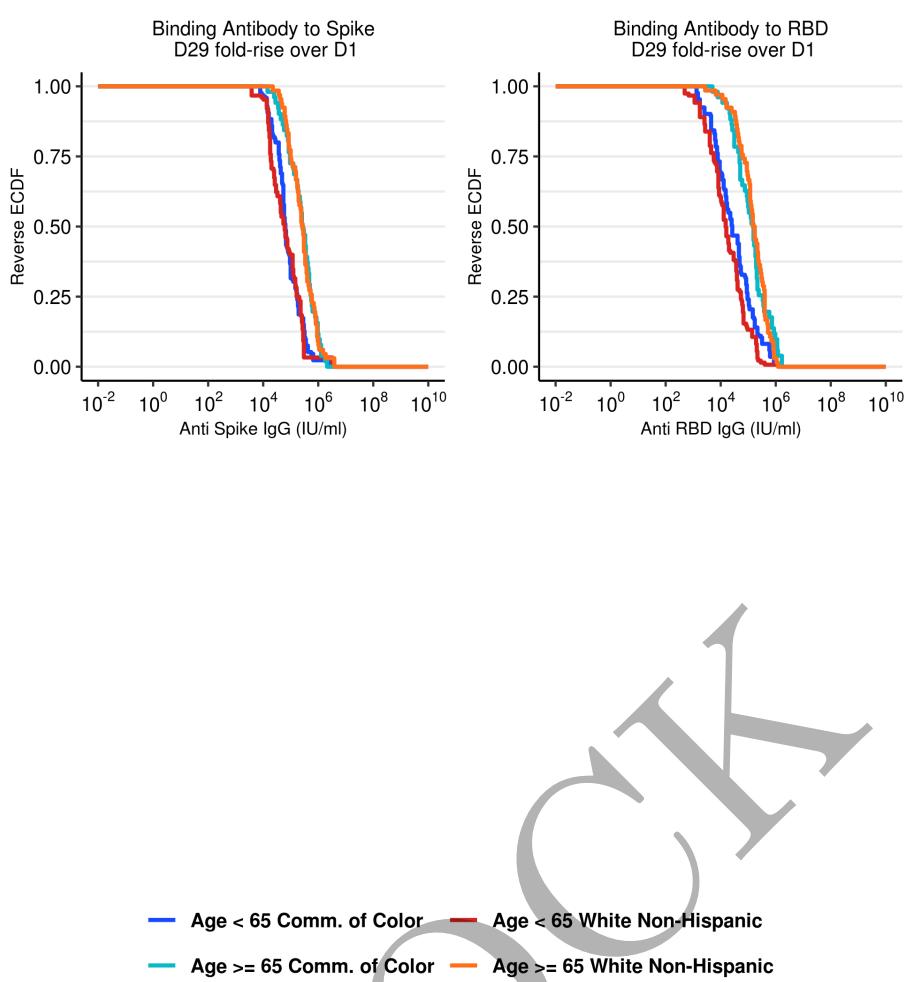


Figure 2.117: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

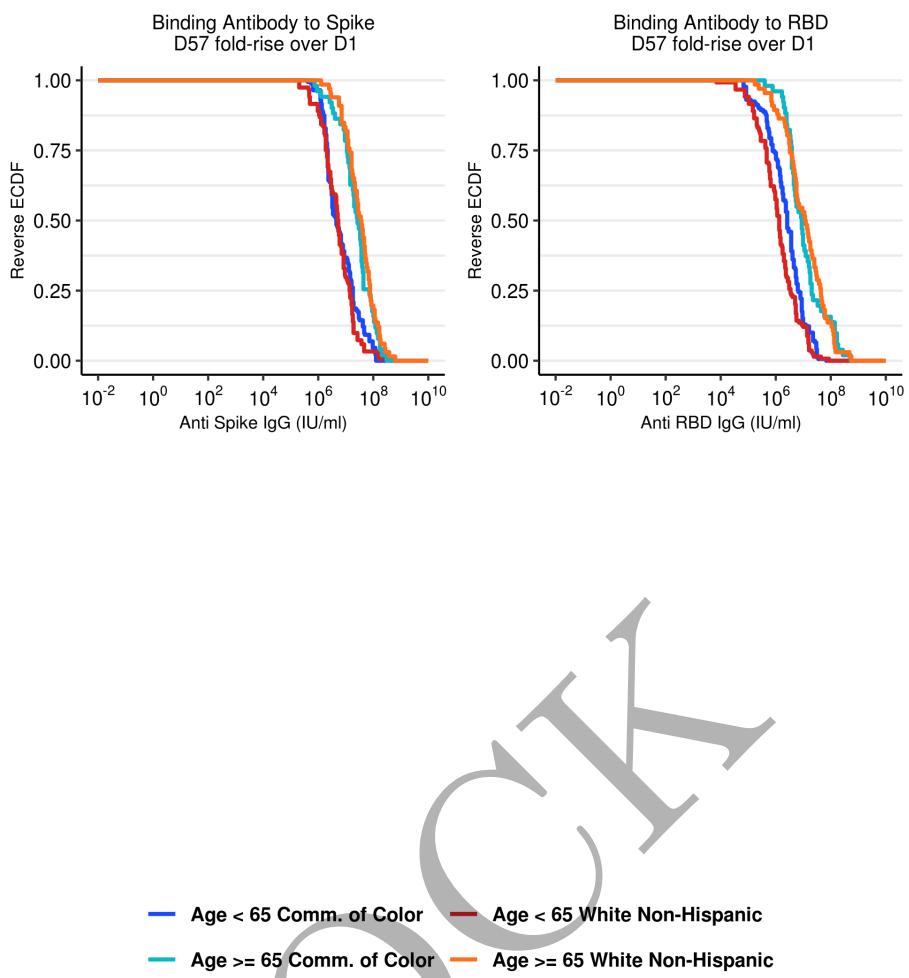


Figure 2.118: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

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

2.7.1 Baseline SARS-CoV-2 negative

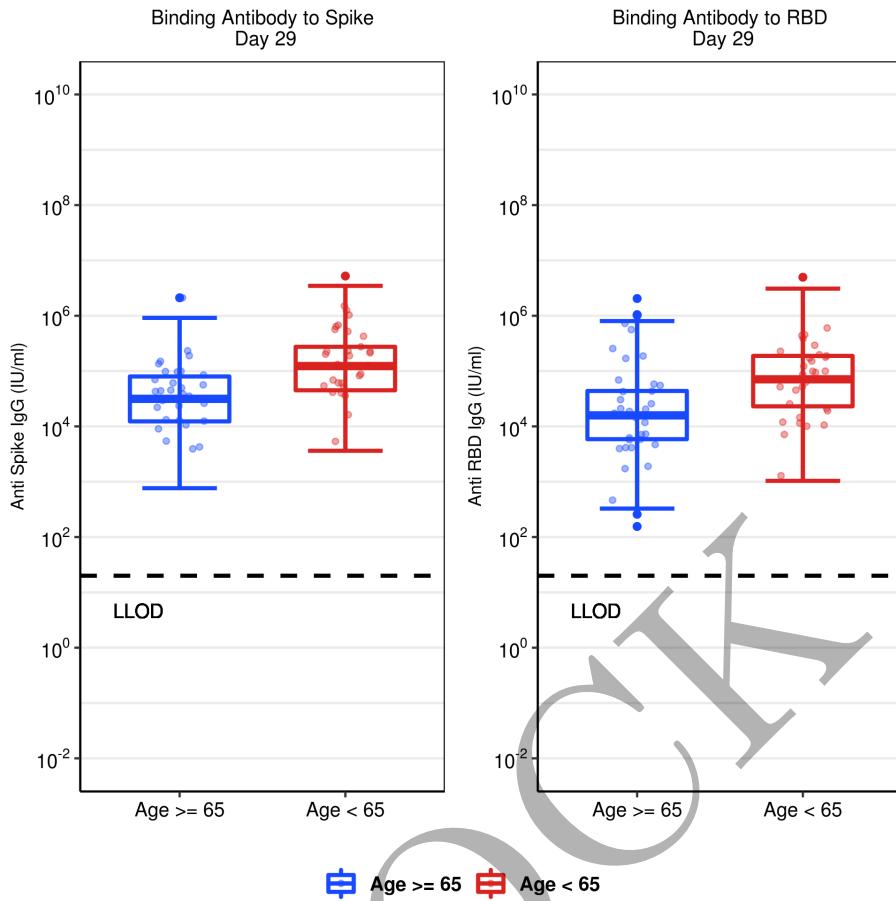


Figure 2.119: Boxplots of D29 Ab markers: Baseline negative vaccine arm by age group.

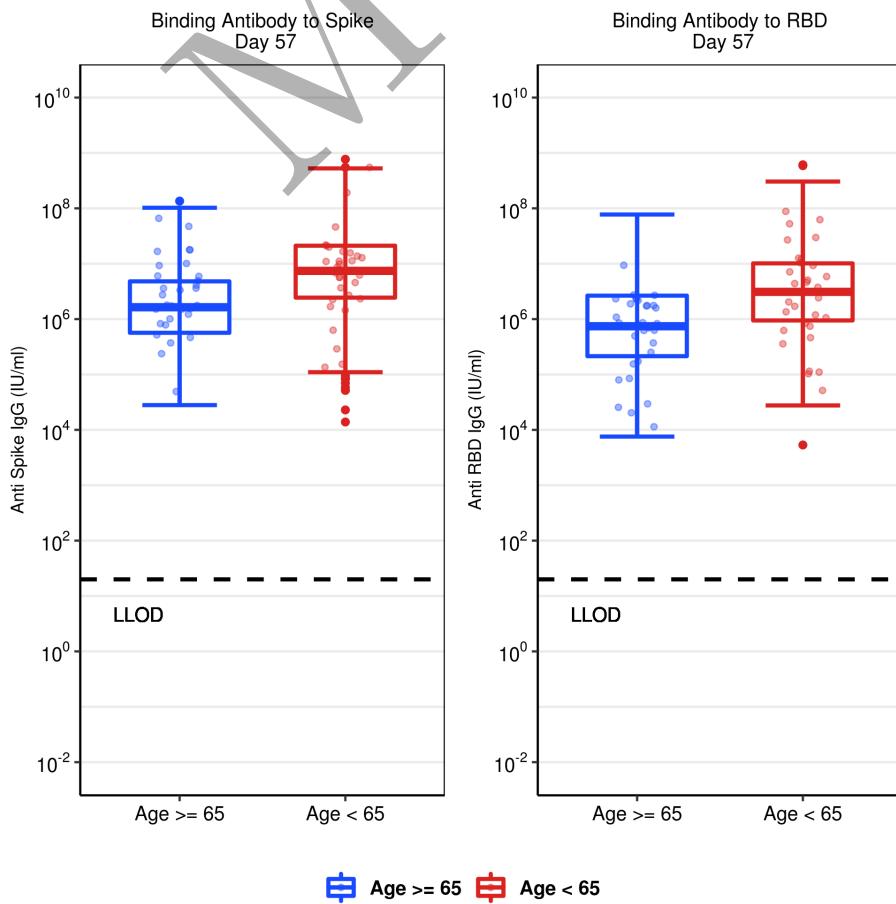


Figure 2.120: Boxplots of D57 Ab markers: Baseline negative vaccine arm by age group.

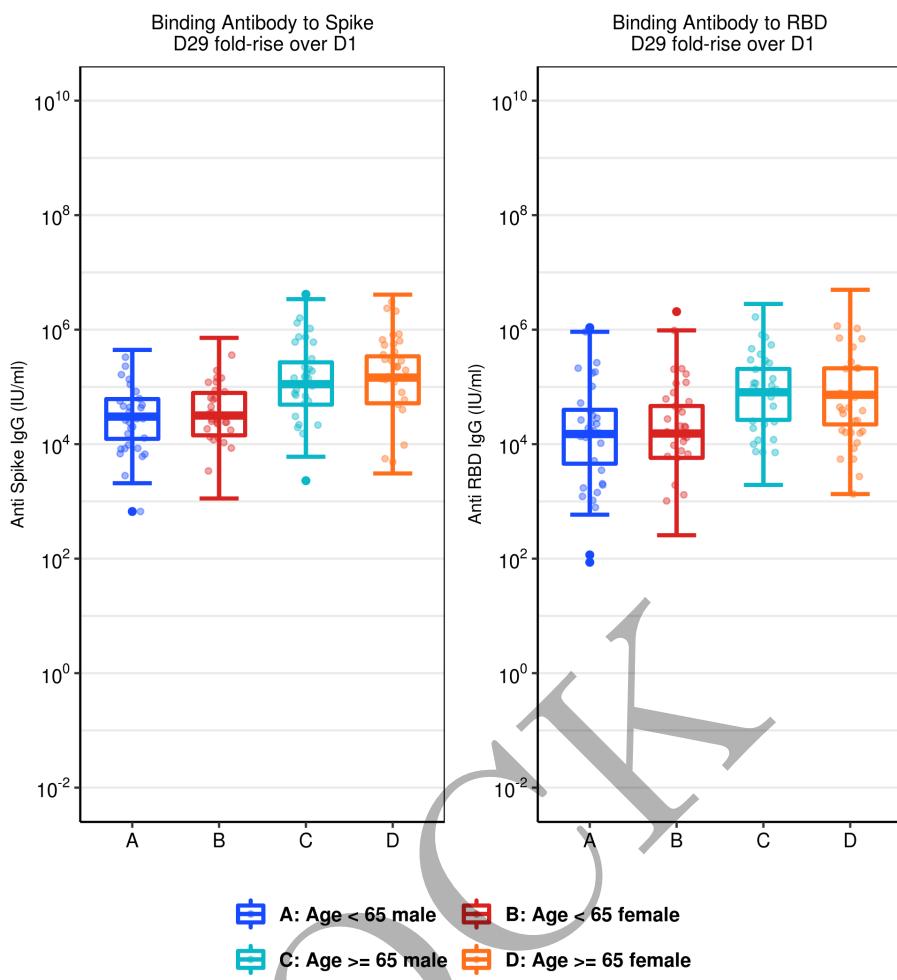


Figure 2.121: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

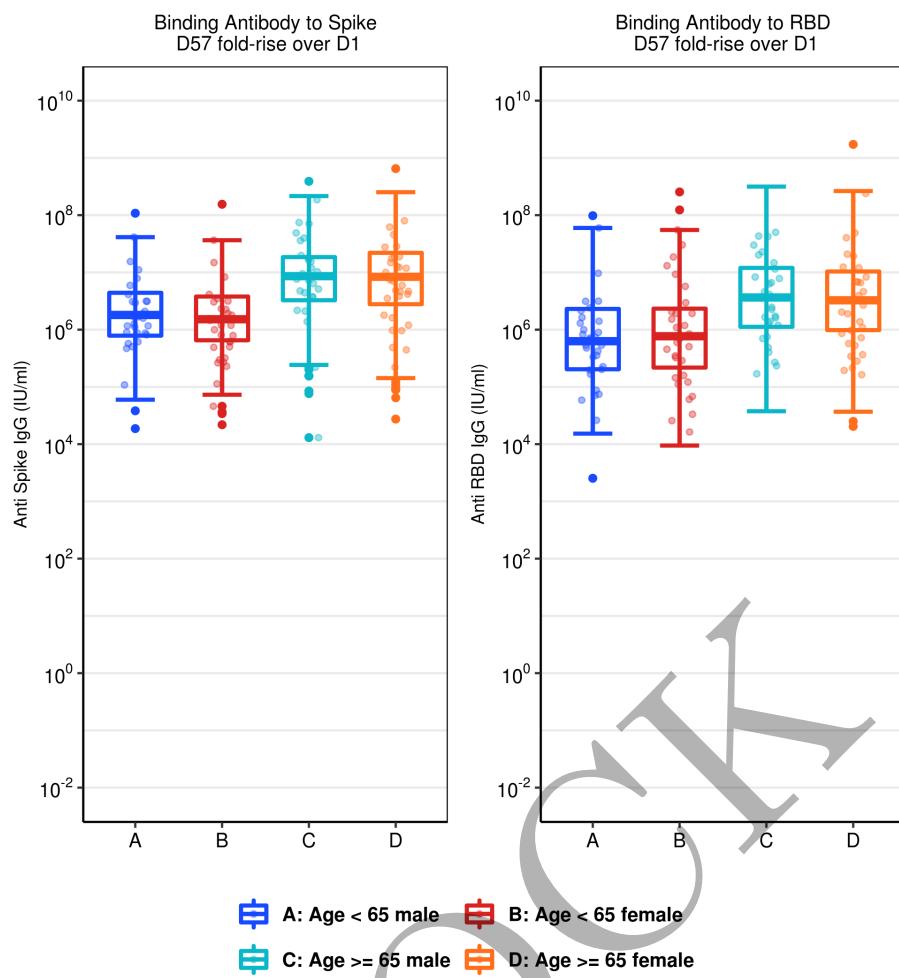


Figure 2.122: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

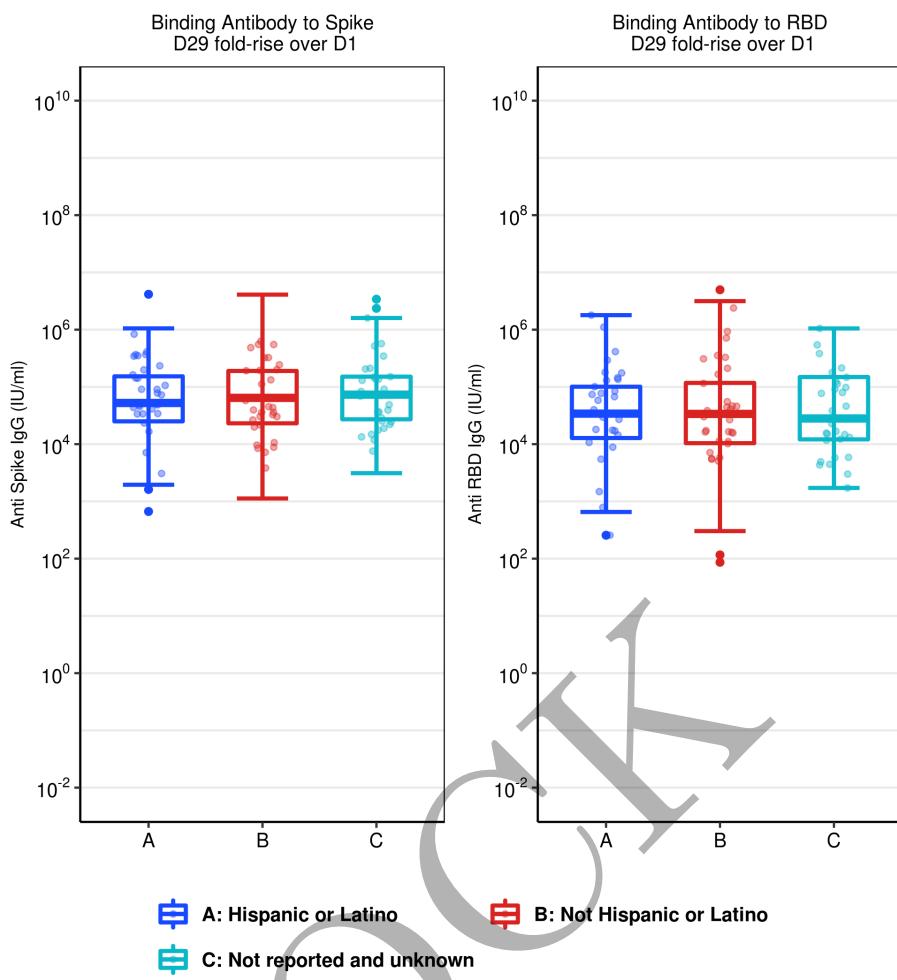


Figure 2.123: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.

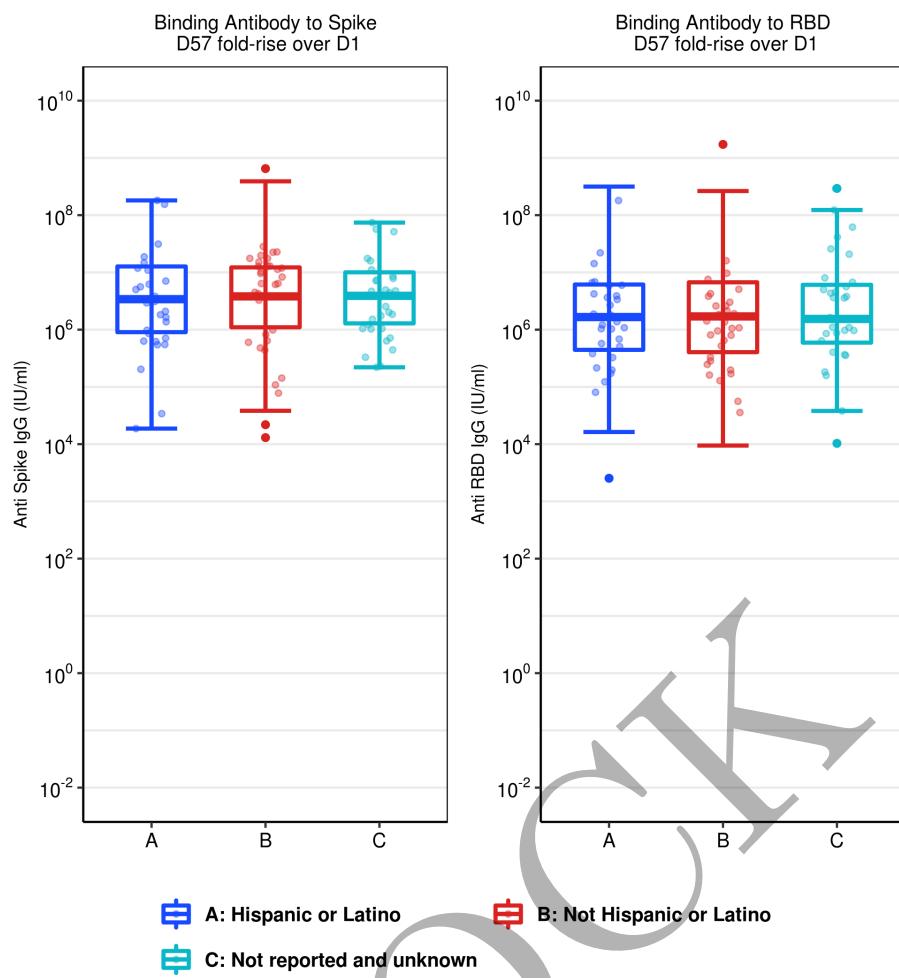


Figure 2.124: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.

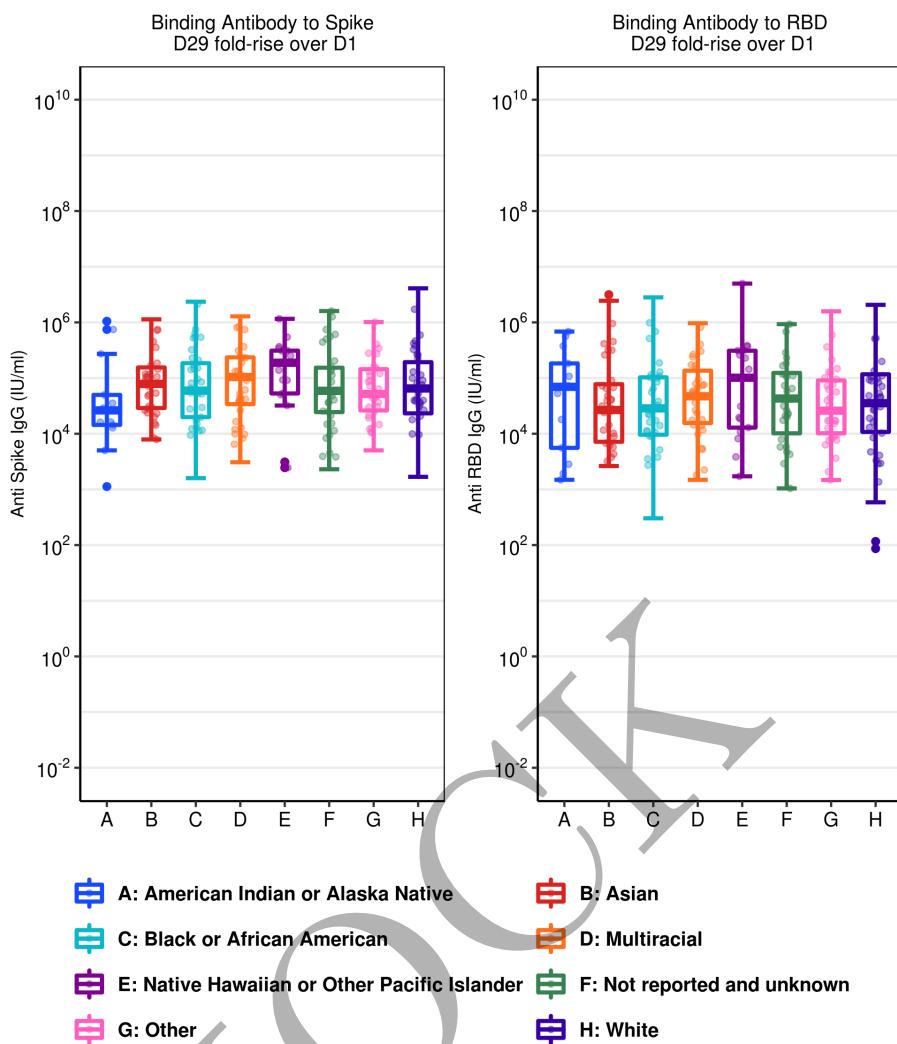


Figure 2.125: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

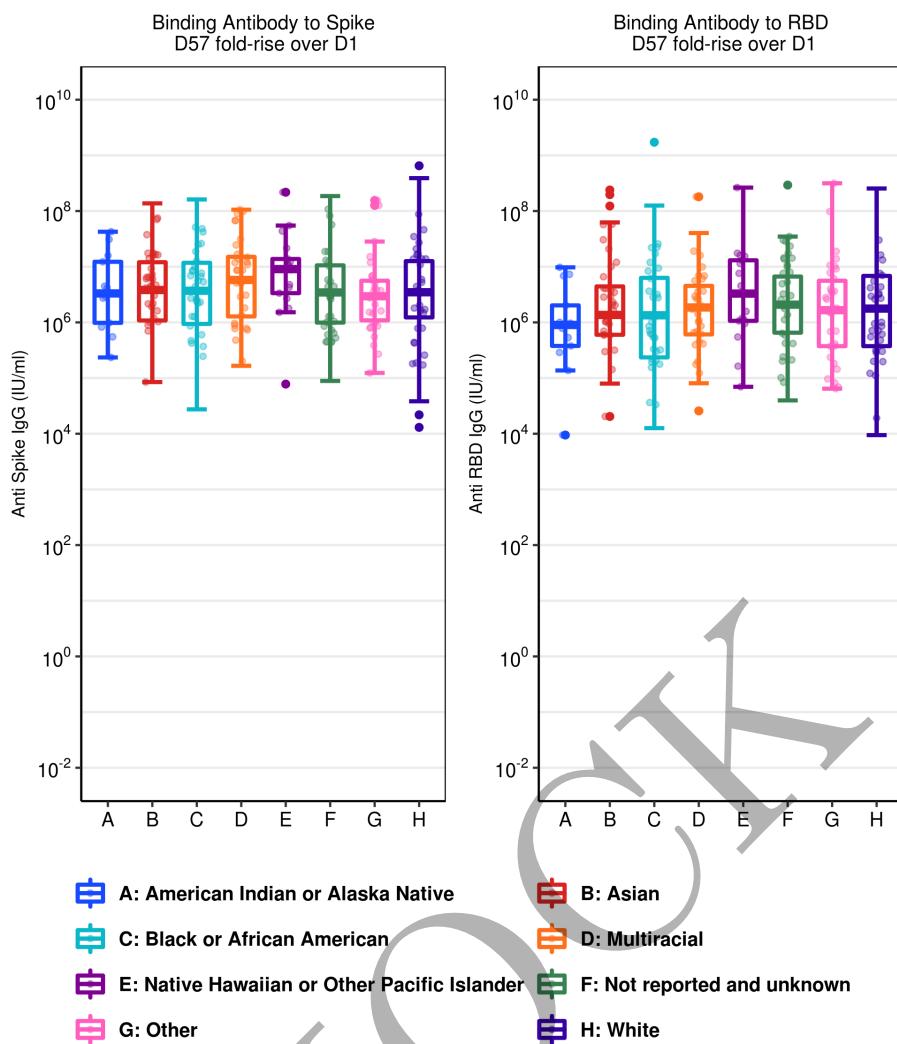


Figure 2.126: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

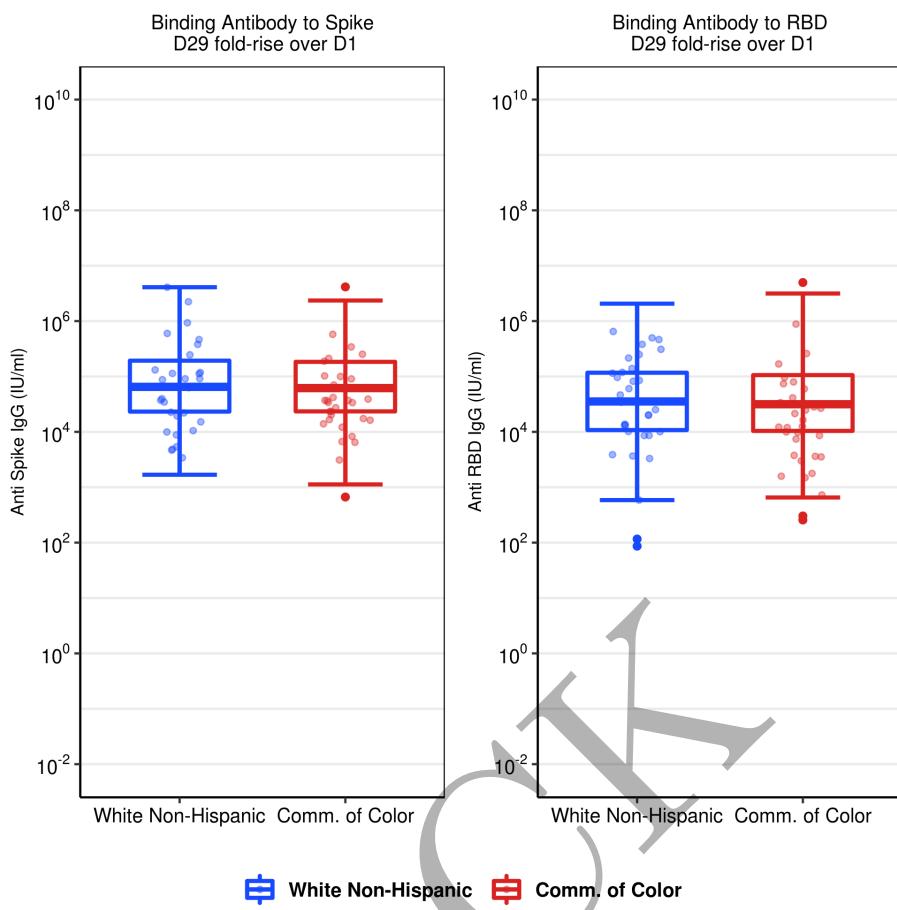


Figure 2.127: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.

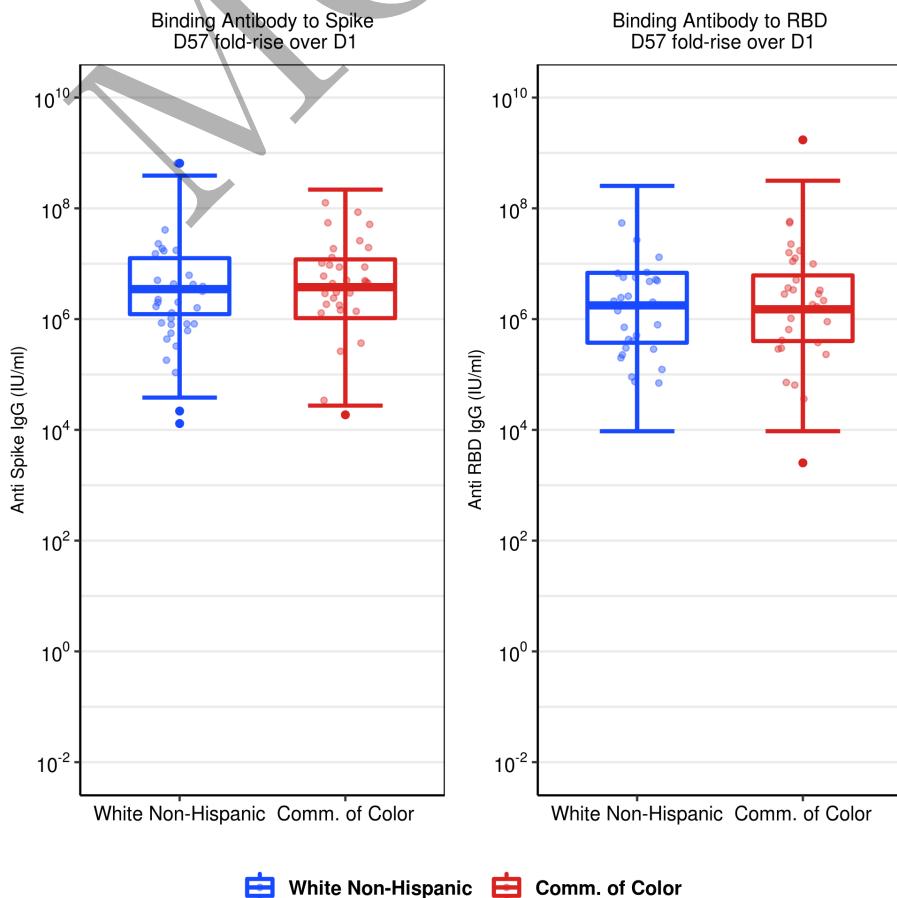


Figure 2.128: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.

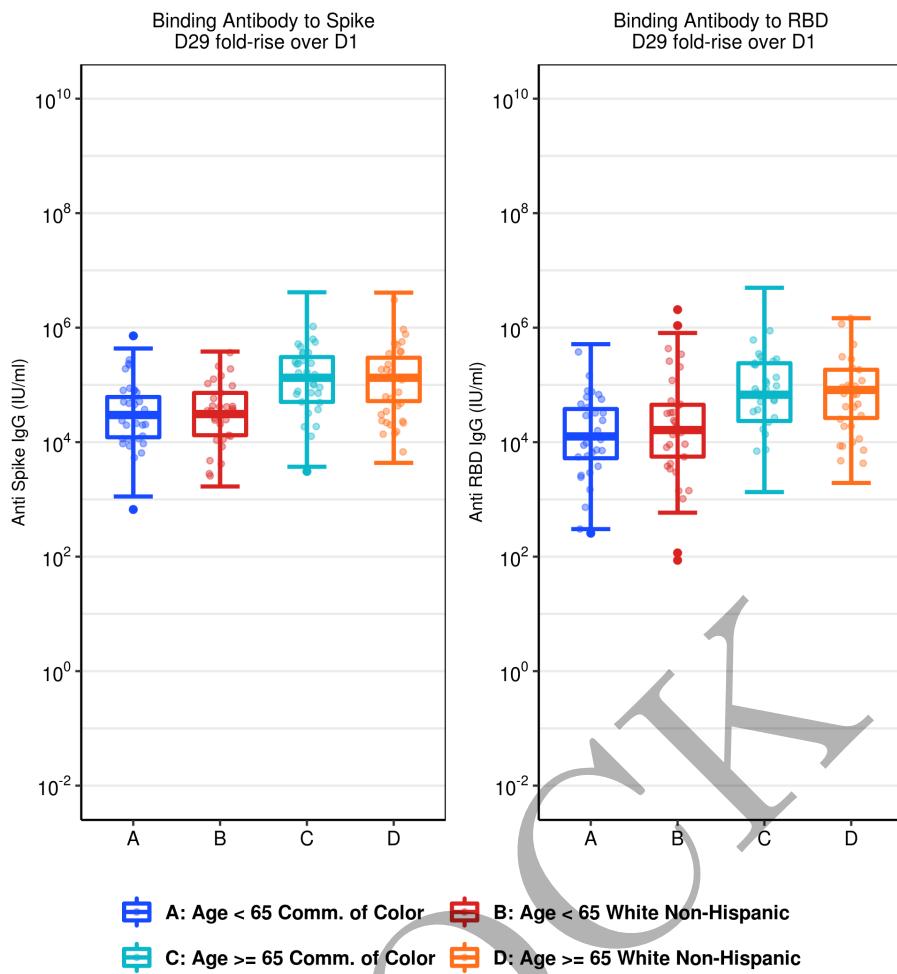


Figure 2.129: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

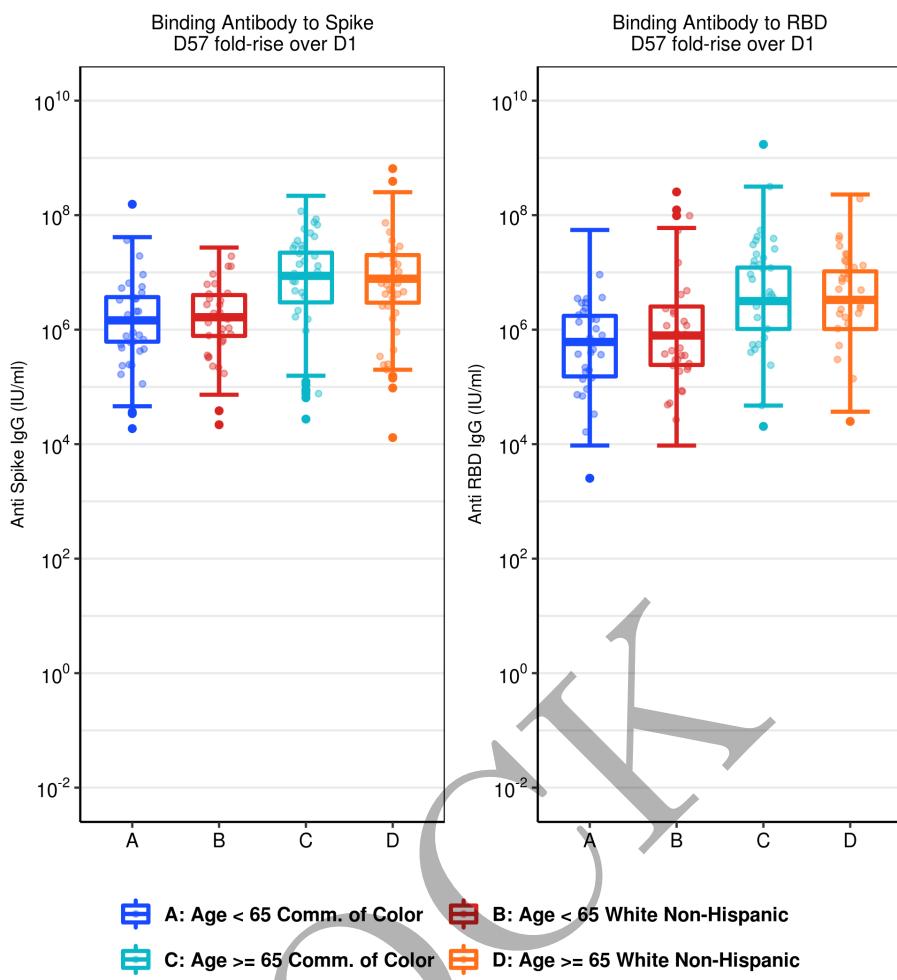


Figure 2.130: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

2.7.2 Baseline SARS-CoV-2 positive

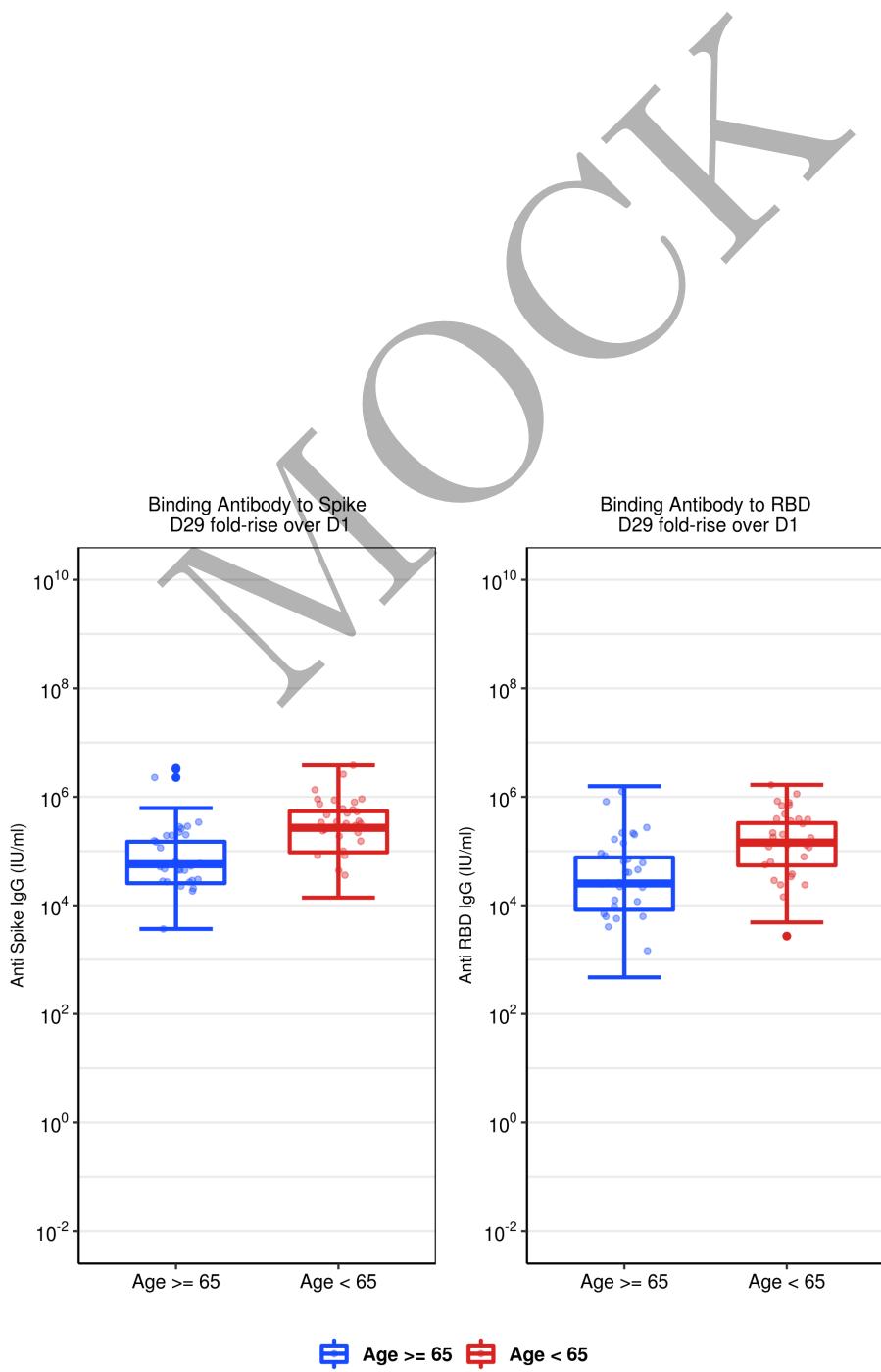


Figure 2.131: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

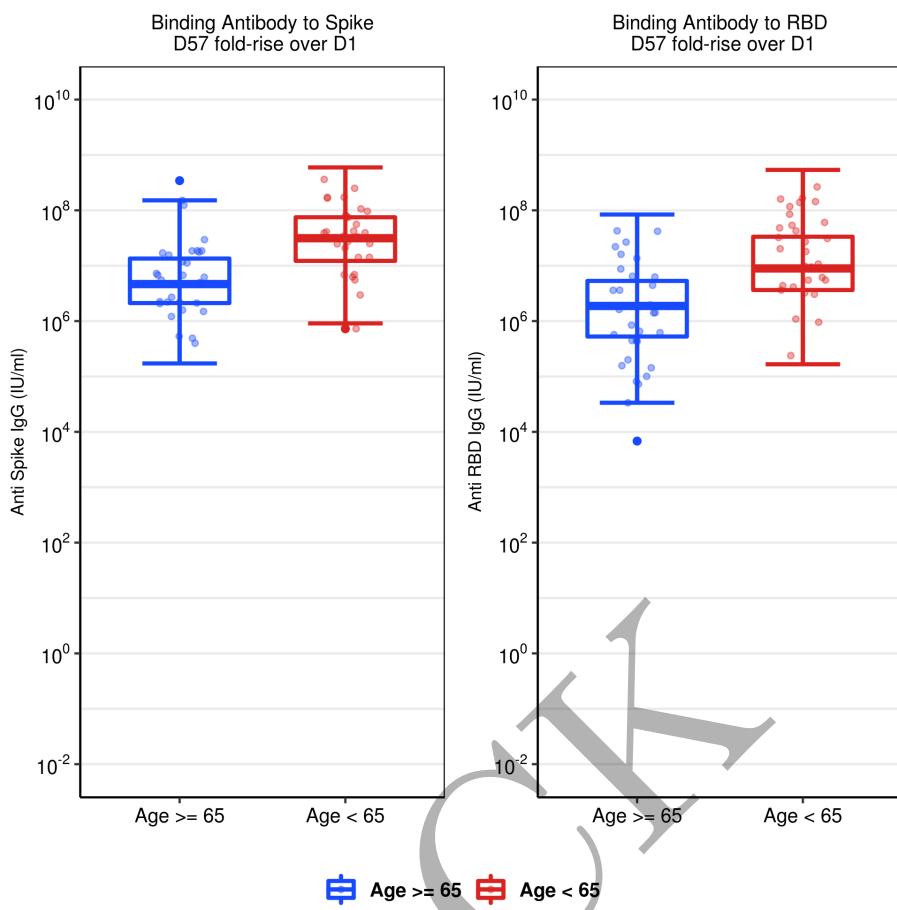


Figure 2.132: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

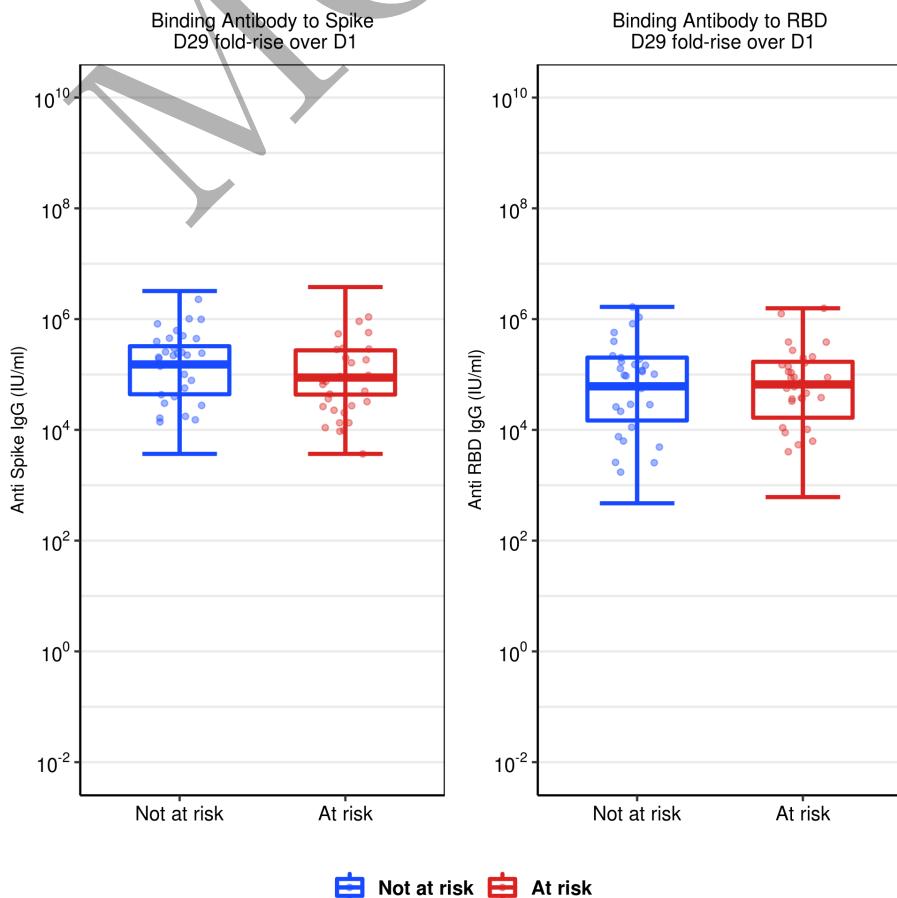


Figure 2.133: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

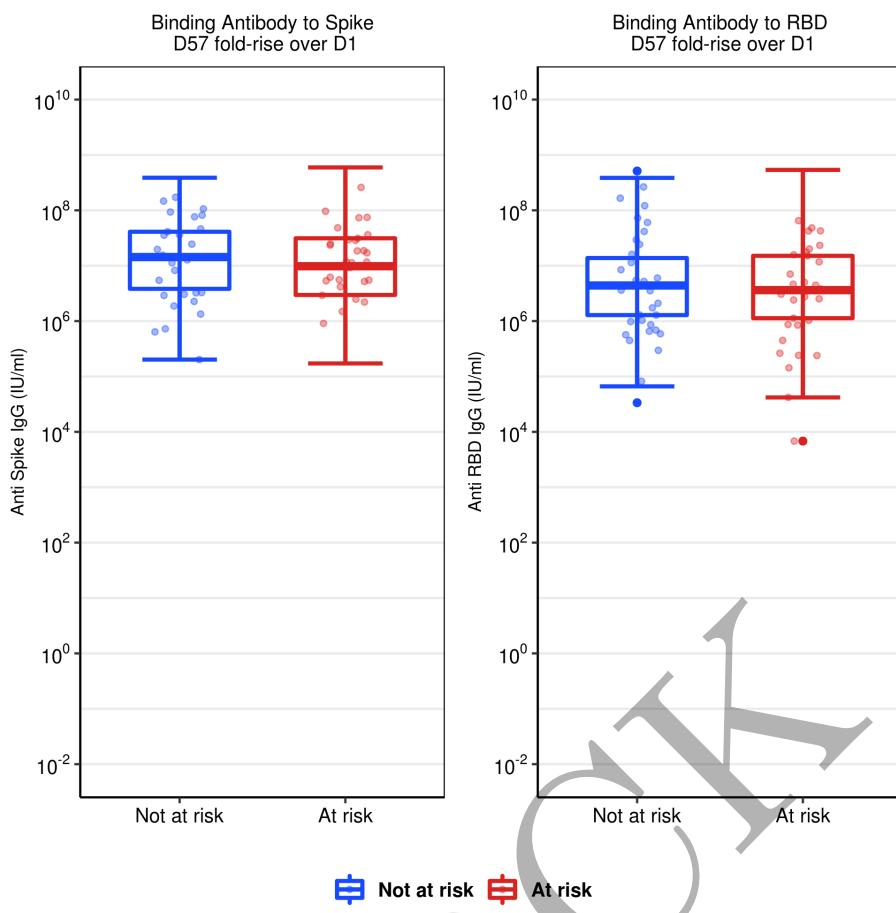


Figure 2.134: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

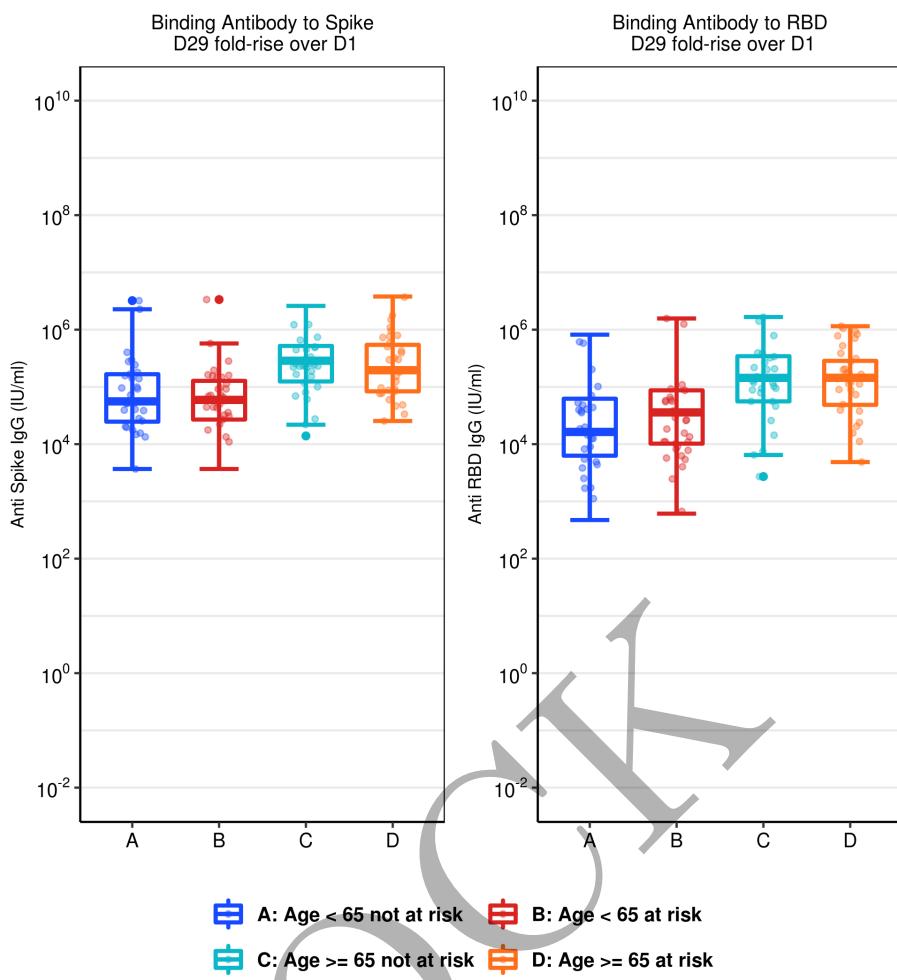


Figure 2.135: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

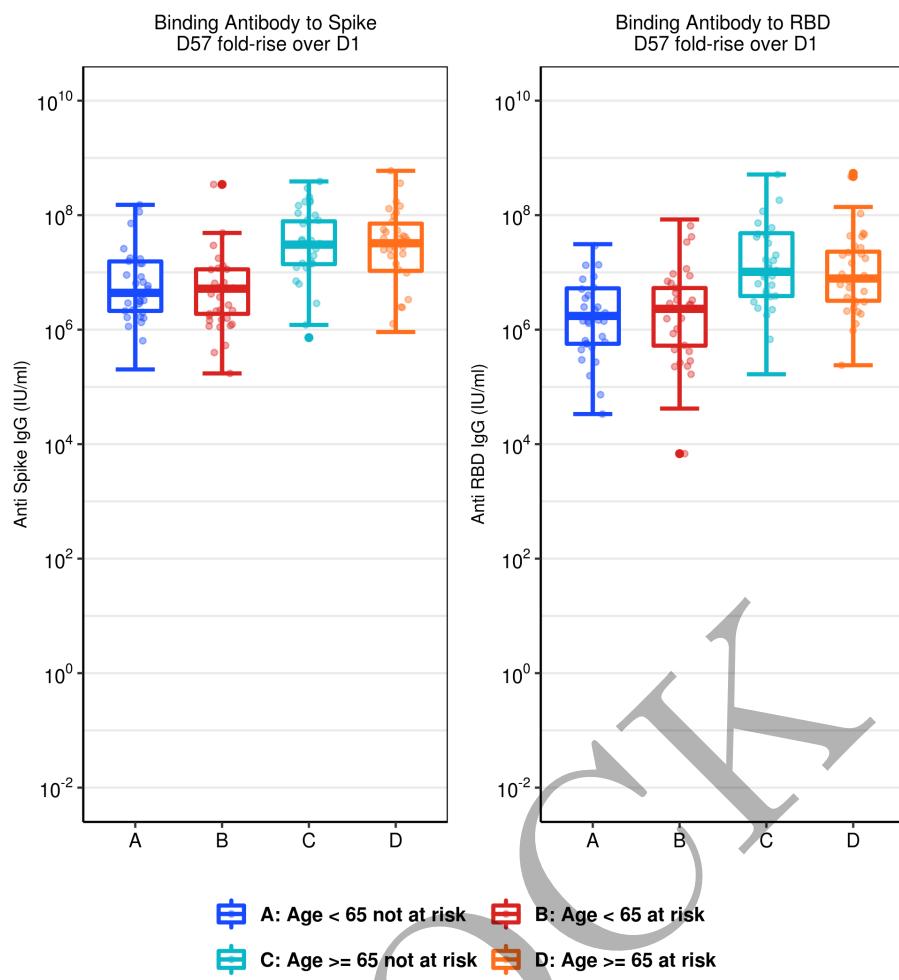


Figure 2.136: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

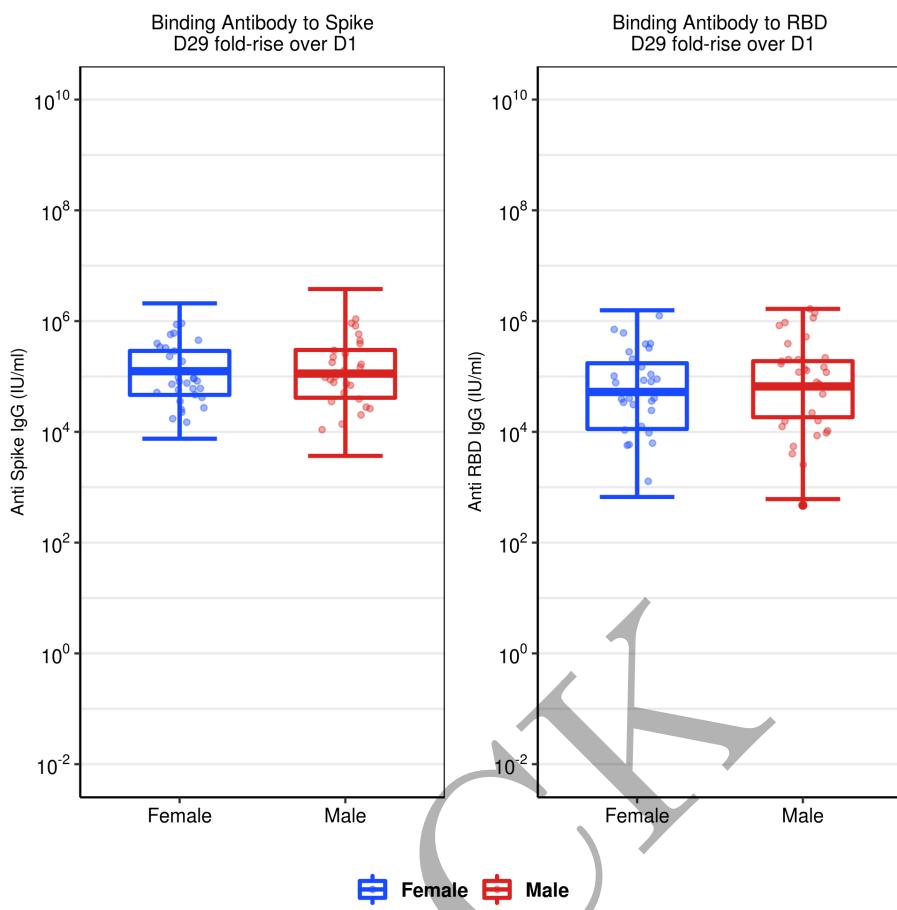


Figure 2.137: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

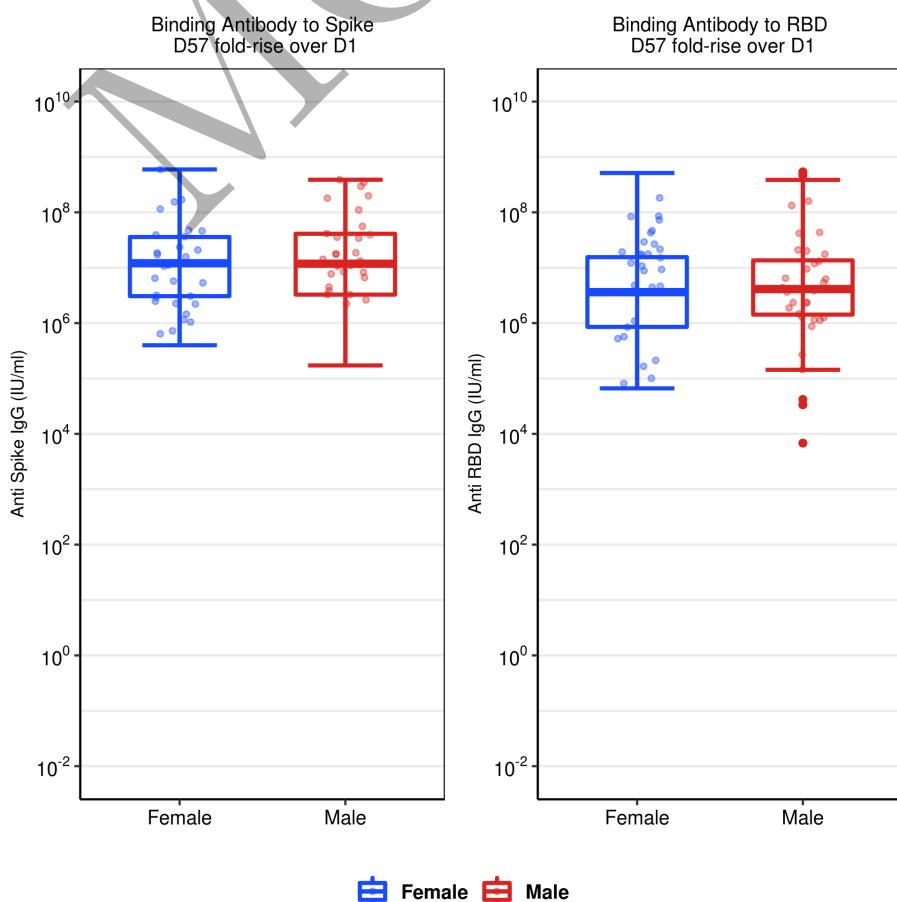


Figure 2.138: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

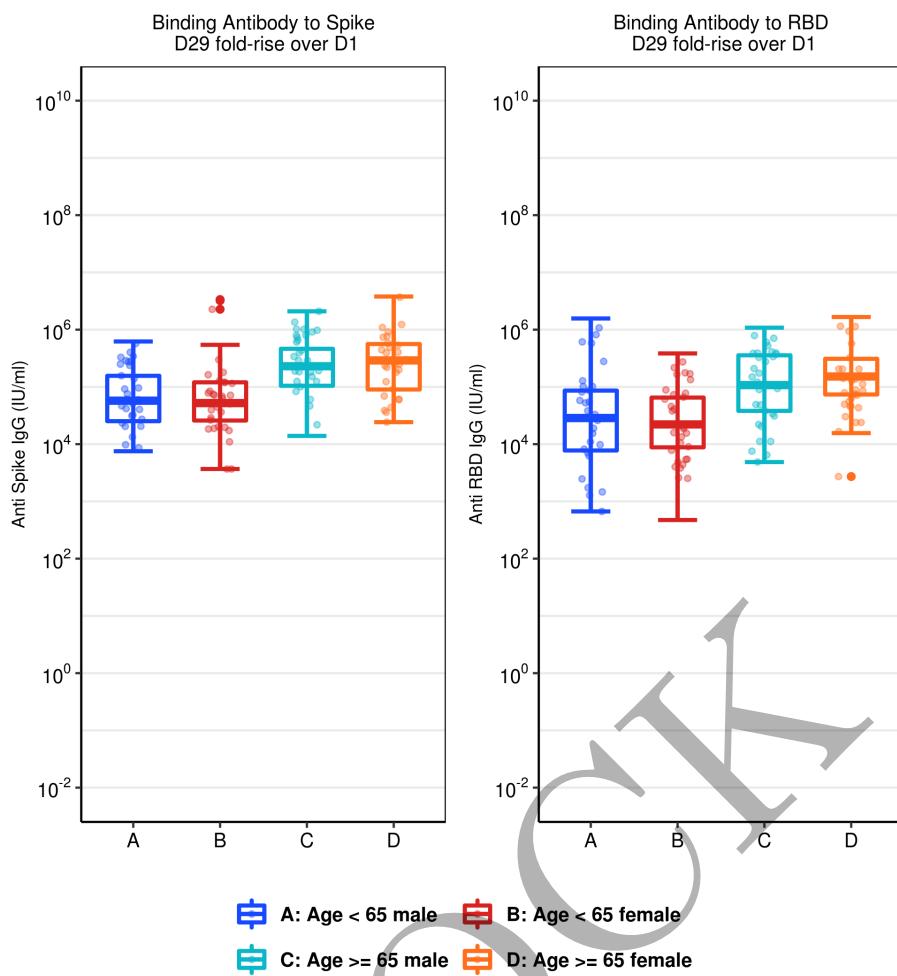


Figure 2.139: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

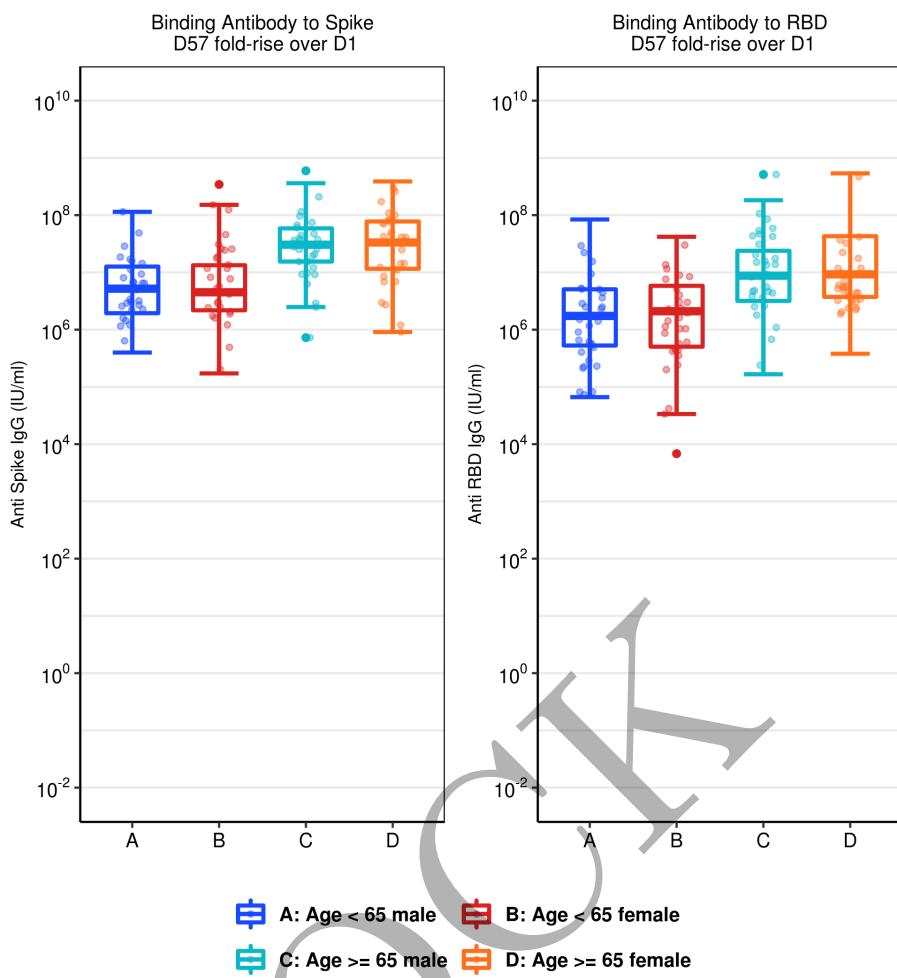


Figure 2.140: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

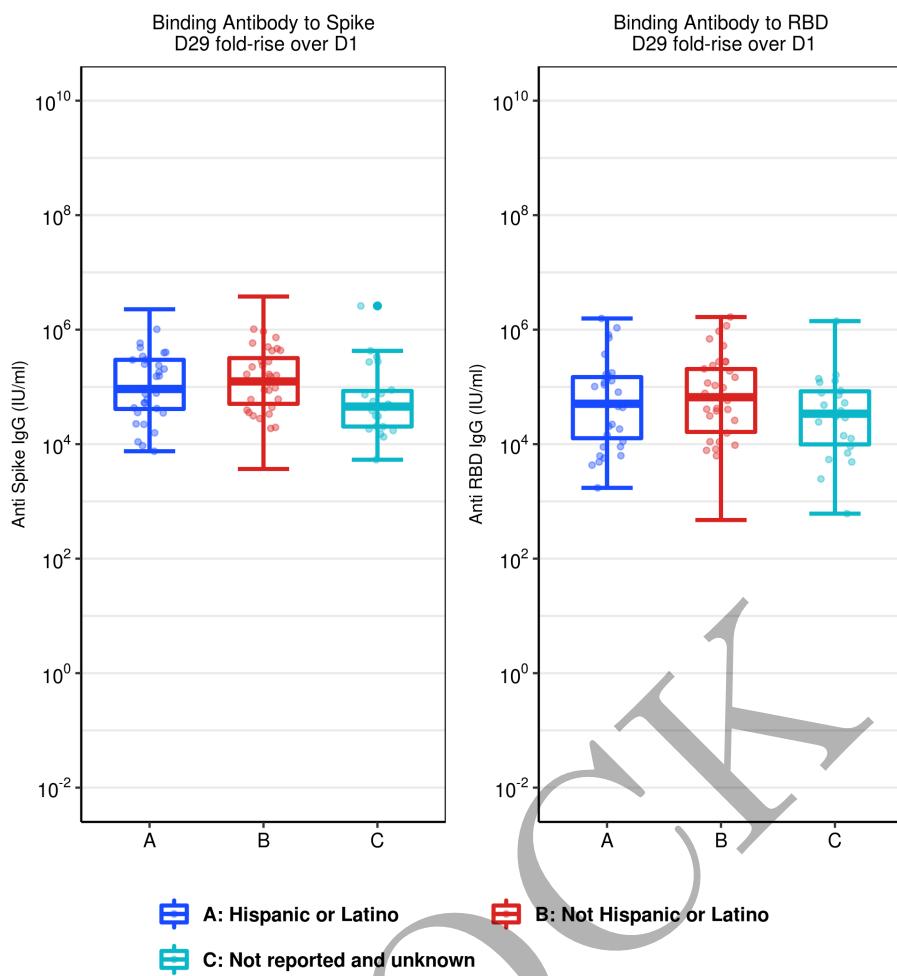


Figure 2.141: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

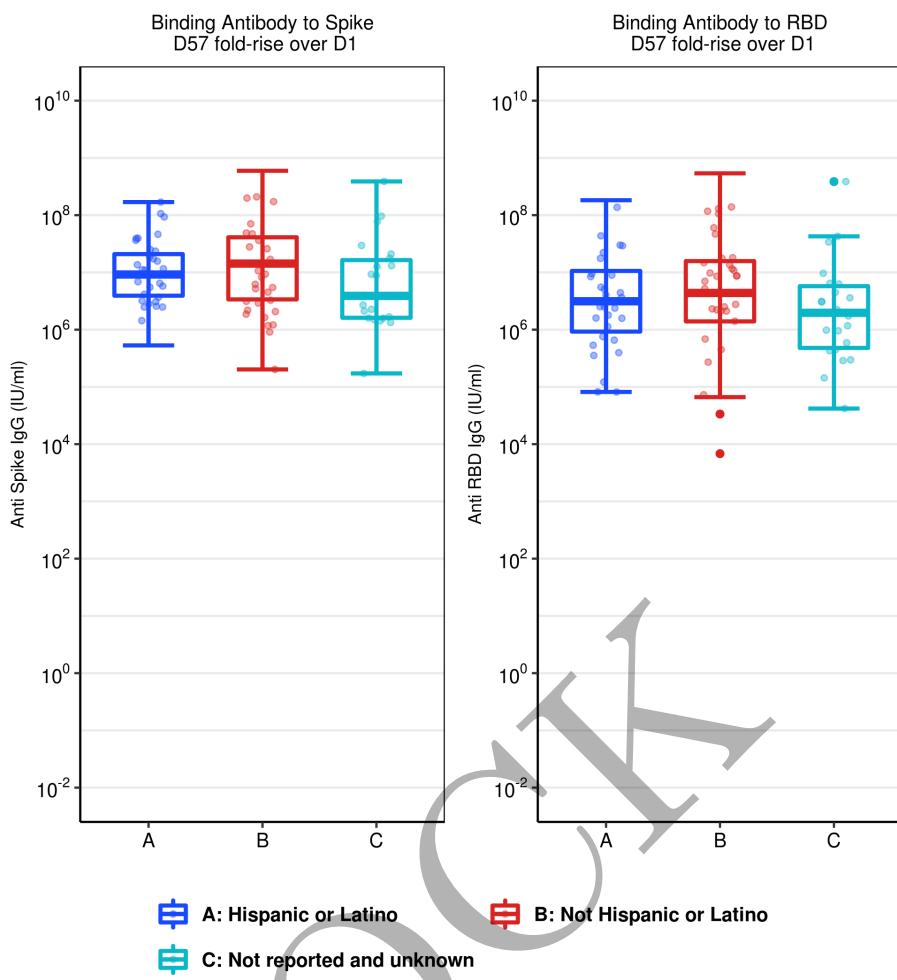


Figure 2.142: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

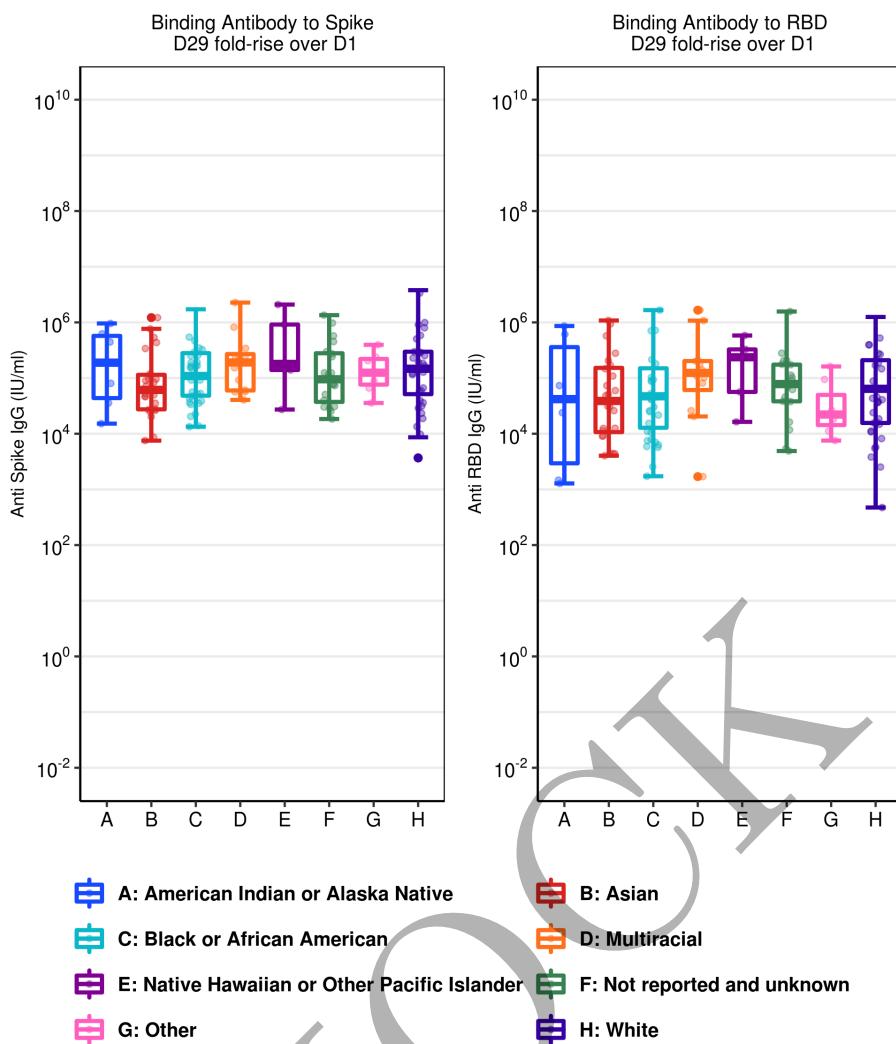


Figure 2.143: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

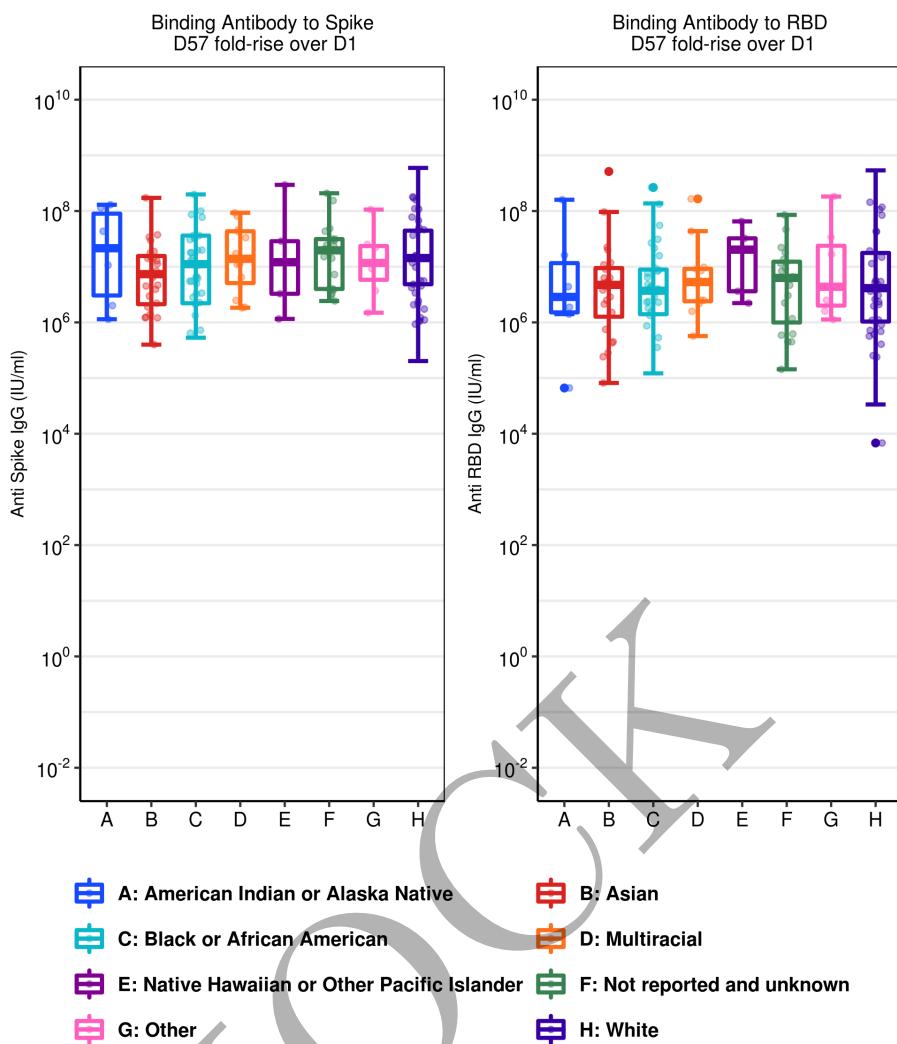


Figure 2.144: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

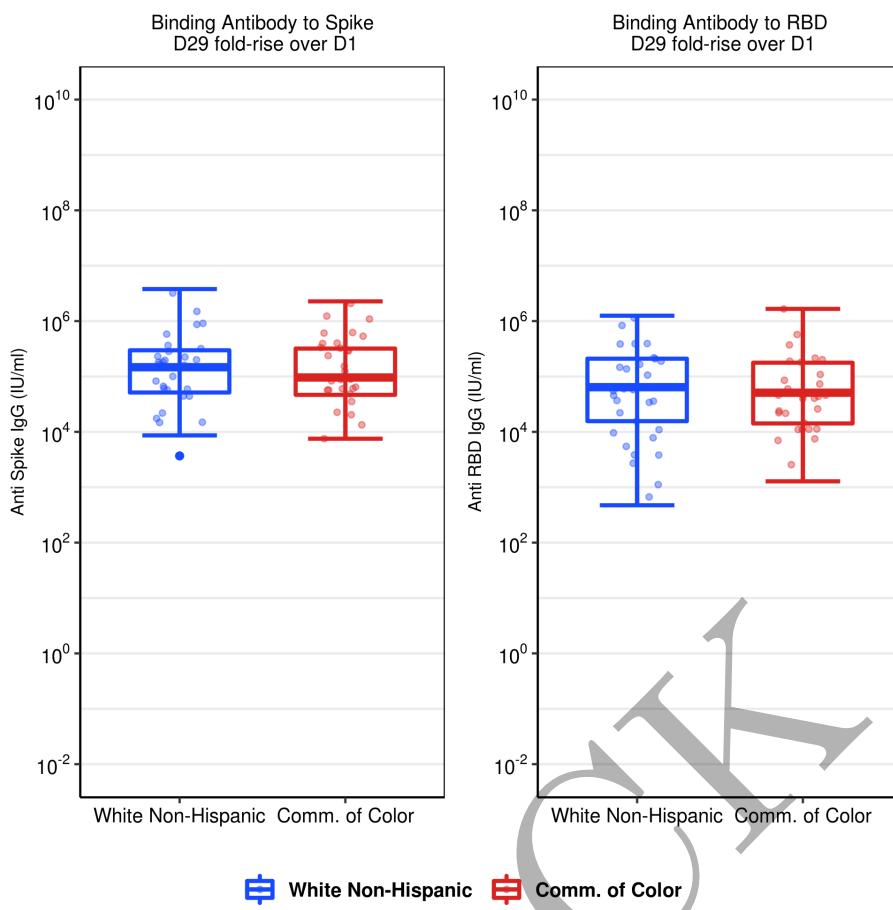


Figure 2.145: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

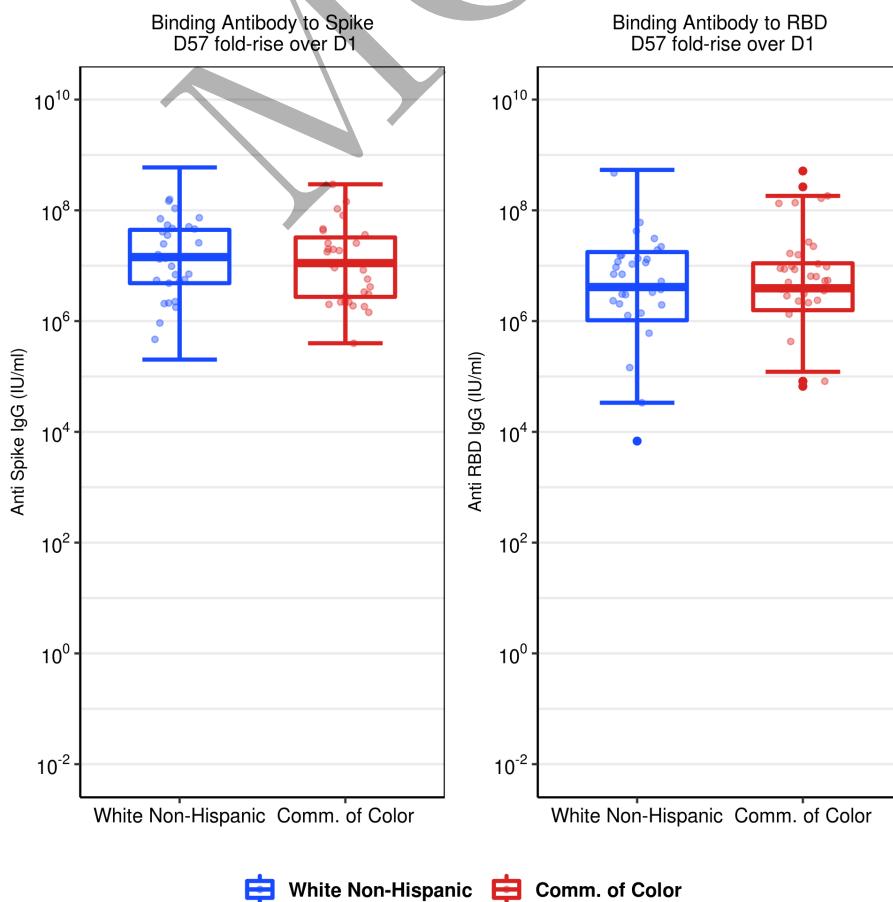


Figure 2.146: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

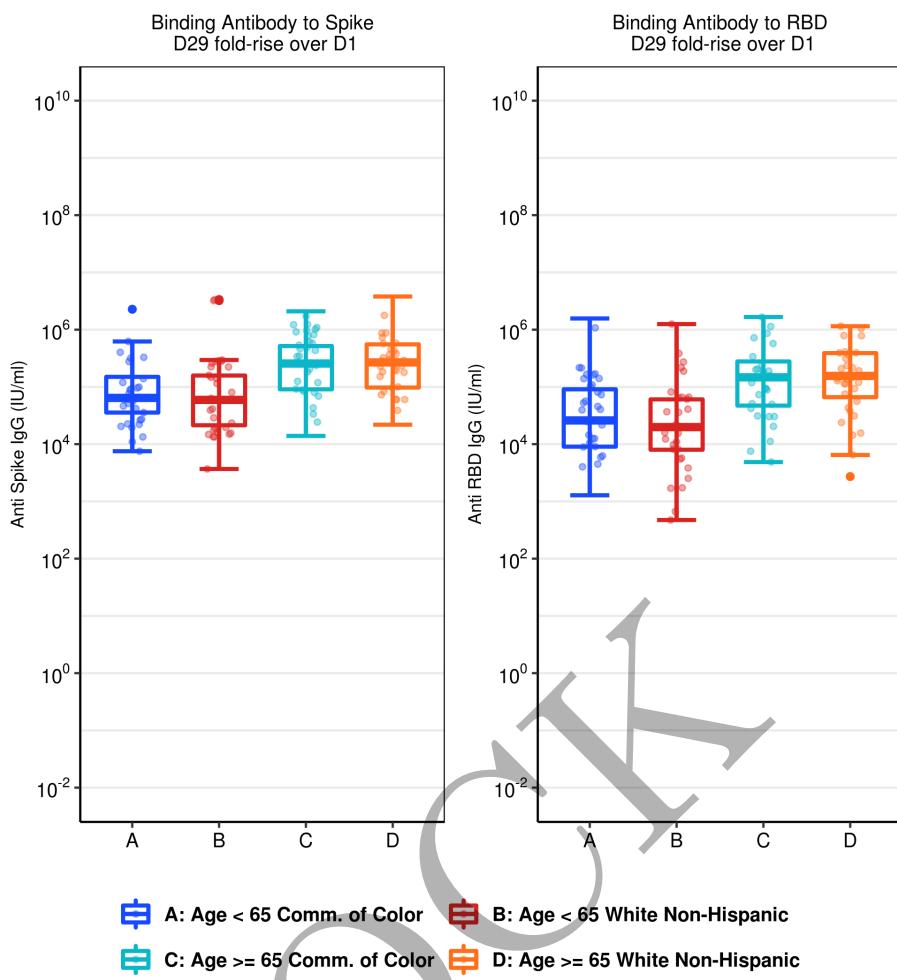


Figure 2.147: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

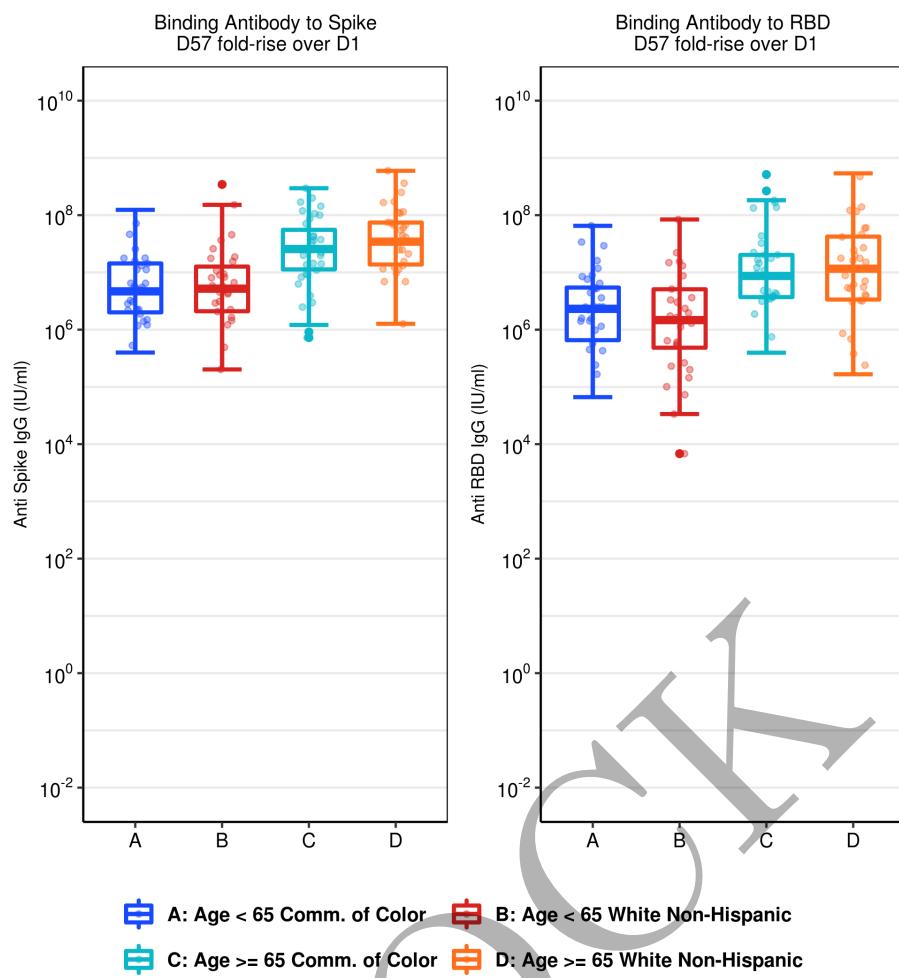


Figure 2.148: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.