

COVID-19 Immunogenicity Analysis Report
mock Study

USG COVID-19 Response Biostatistics Team

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Contents

1 Tabular Description of Immunogenicity Data	17
1.1 Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Negative Per-Protocol Cohort	17
1.2 Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Positive Per-Protocol Cohort	19
1.3 Sample Sizes of Random Subcohort Strata for Measuring Antibody Markers	20
1.4 Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers	21
1.5 Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers	91
1.6 Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers	161
1.7 Geometric mean titers (GMTs) and geometric mean concentrations (GMCs)	189
1.8 Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination	317
1.9 The ratios of GMTs/GMCs between groups	413
1.10 Differences in the responder rates, 2FRs, 4FRs between the groups	450
1.11 Antibody levels in the baseline SARS-CoV-2 negative per-protocol cohort (vaccine vs. placebo)	479
1.12 Antibody levels in the baseline SARS-CoV-2 positive per-protocol cohort (vaccine vs. placebo)	480
1.13 Antibody levels in the per-protocol cohort (vaccine recipients)	481
1.14 Antibody levels in the per-protocol cohort (placebo recipients)	482
2 Graphical Description of Immunogenicity Data	483
2.1 Pairs plots of antibody markers for overall per-protocol cohort	483
2.2 RCDF plots of antibody markers for overall per-protocol cohort	502
2.3 Scatter plots of antibody markers versus age for overall per-protocol cohort	518
2.4 Box plots of antibody markers for overall per-protocol cohort	522
2.5 Spaghetti plots of antibody markers over time for the overall per-protocol cohort	538
2.6 RCDF plots of antibody markers by demographics for per-protocol cohort	540
2.7 Boxplots of antibody markers by demographics for per-protocol cohort	612
3 Appendix	643

List of Tables

1.1	Table 1. Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Negative Per-Protocol Cohort	17
1.2	Table 2. Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Positive Per-Protocol Cohort	19
1.3	Table 3. Sample Sizes of Random Subcohort Strata for Measuring Antibody Markers	20
1.4	Table 4a. Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers by All participants	21
1.5	Table 4b. Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers by Age	23
1.6	Table 4c. Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers by Risk for Severe Covid-19	27
1.7	Table 4d. Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers by Age, Risk for Severe Covid-19	31
1.8	Table 4e. Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers by Sex	40
1.9	Table 4f. Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers by Age, sex	44
1.10	Table 4g. Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers by Hispanic or Latino ethnicity	52
1.11	Table 4h. Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers by Race	58
1.12	Table 4i. Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers by Communities of color	75
1.13	Table 4j. Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers by Age, Communities of color	80
1.14	Table 5a. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by All participants	91
1.15	Table 5b. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Age	93
1.16	Table 5c. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Risk for Severe Covid-19	97
1.17	Table 5d. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Age, Risk for Severe Covid-19	101

1.18 Table 5e. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Sex	110
1.19 Table 5f. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Age, sex	114
1.20 Table 5g. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Hispanic or Latino ethnicity	122
1.21 Table 5h. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Race	128
1.22 Table 5i. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Communities of color	145
1.23 Table 5j. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Age, Communities of color	150
1.24 Table 6a. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by All participants	161
1.25 Table 6b. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age . . .	162
1.26 Table 6c. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Risk for Severe Covid-19	164
1.27 Table 6d. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, Risk for Severe Covid-19	166
1.28 Table 6e. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Sex	169
1.29 Table 6f. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, sex . .	171
1.30 Table 6g. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Hispanic or Latino ethnicity	174
1.31 Table 6h. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Race . . .	177
1.32 Table 6i. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Communities of color	183
1.33 Table 6j. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, Communities of color	185
1.34 Table 7a. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by All participants	189
1.35 Table 7b. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age	194
1.36 Table 7c. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Risk for Severe Covid-19	202
1.37 Table 7d. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Risk for Severe Covid-19	210

1.38 Table 7e. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Sex	226
1.39 Table 7f. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, sex	234
1.40 Table 7g. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Hispanic or Latino ethnicity	250
1.41 Table 7h. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Race	262
1.42 Table 7i. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Communities of color	293
1.43 Table 7j. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Communities of color	301
1.44 Table 8a. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by All participants	317
1.45 Table 8b. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age	320
1.46 Table 8c. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Risk for Severe Covid-19	326
1.47 Table 8d. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Risk for Severe Covid-19	332
1.48 Table 8e. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Sex	343
1.49 Table 8f. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, sex	349
1.50 Table 8g. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Hispanic or Latino ethnicity	360
1.51 Table 8h. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Race	369
1.52 Table 8i. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Communities of color	393
1.53 Table 8j. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Communities of color	399
1.54 Table 9a. The ratios of GMTs/GMCs between groups by Age	413
1.55 Table 9b. The ratios of GMTs/GMCs between groups by Risk for Severe Covid-19	418
1.56 Table 9c. The ratios of GMTs/GMCs between groups by Age < 65, Risk for Severe Covid-19	422
1.57 Table 9d. The ratios of GMTs/GMCs between groups by Age >= 65, Risk for Severe Covid-19	428
1.58 Table 9e. The ratios of GMTs/GMCs between groups by Sex	434
1.59 Table 9f. The ratios of GMTs/GMCs between groups by Hispanic or Latino ethnicity	438
1.60 Table 9g. The ratios of GMTs/GMCs between groups by Communities of color	444
1.61 Table 10a. Differences in the responder rates, 2FRs, 4FRs between the groups by Arm	450
1.62 Table 10b. Differences in the responder rates, 2FRs, 4FRs between the groups by Baseline SARS-CoV-2	452
1.63 Table 10c. Differences in the responder rates, 2FRs, 4FRs between the groups by Age	454

1.64 Table 10d. Differences in the responder rates, 2FRs, 4FRs between the groups by Risk for Severe Covid-19	457
1.65 Table 10e. Differences in the responder rates, 2FRs, 4FRs between the groups by Age < 65, Risk for Severe Covid-19	460
1.66 Table 10f. Differences in the responder rates, 2FRs, 4FRs between the groups by Age >= 65, Risk for Severe Covid-19	464
1.67 Table 10g. Differences in the responder rates, 2FRs, 4FRs between the groups by Sex	468
1.68 Table 10h. Differences in the responder rates, 2FRs, 4FRs between the groups by Hispanic or Latino ethnicity	471
1.69 Table 10i. Differences in the responder rates, 2FRs, 4FRs between the groups by Communities of color	475
1.70 Table 11. Antibody levels in the baseline SARS-CoV-2 negative per-protocol cohort (vaccine vs. placebo)	479
1.71 Table 12. Antibody levels in the baseline SARS-CoV-2 positive per-protocol cohort (vaccine vs. placebo)	480
1.72 Table 13. Antibody levels in the per-protocol cohort (vaccine recipients)	481
1.73 Table 14. Antibody levels in the per-protocol cohort (placebo recipients)	482

List of Figures

2.1	Pair plots of D29 Ab markers: baseline negative vaccine arm	484
2.2	Pair plots of D57 Ab markers: baseline negative vaccine arm	485
2.3	Pair plots of D29 fold-rise over D1 Ab markers: baseline negative vaccine arm	486
2.4	Pair plots of D57 fold-rise over D1 Ab markers: baseline negative vaccine arm	487
2.5	Pair plots of D1, D29 and D57 Binding Antibody to N: baseline negative vaccine arm	488
2.6	Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline negative vaccine arm	489
2.7	Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative vaccine arm	490
2.8	Pair plots of D1, D29 and D57 nAb Neutralization 50% Titer: baseline negative vaccine arm	491
2.9	Pair plots of D1, D29 and D57 nAb Neutralization 80% Titer: Baseline negative vaccine arm	492
2.10	Pair plots of D29 Ab markers: baseline positive vaccine arm	493
2.11	Pair plots of D57 Ab markers: baseline positive vaccine arm	494
2.12	Pair plots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm	495
2.13	Pair plots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm	496
2.14	Pair plots of D1, D29 and D57 Binding Antibody to N: baseline positive vaccine arm	497
2.15	Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline positive vaccine arm	498
2.16	Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline positive vaccine arm	499
2.17	Pair plots of D1, D29 and D57 nAb Neutralization 50% Titer: baseline positive vaccine arm	500
2.18	Pair plots of D1, D29 and D57 nAb Neutralization 80% Titer: Baseline positive vaccine arm	501
2.19	RCDF plots for D29 Ab markers: by baseline status x randomization arm	502
2.20	RCDF plots for D57 Ab markers: by baseline status x randomization arm	503
2.21	RCDF plots for D29 fold-rise over D1 Ab markers: by baseline status x randomization arm	504
2.22	RCDF plots for D57 fold-rise over D1 Ab markers: by baseline status x randomization arm	505
2.23	RCDF plots for D29 bAb markers: by baseline status for the vaccine arm	506
2.24	RCDF plots for D29 nAb markers: by baseline status for the vaccine arm	506
2.25	RCDF plots for D57 bAb markers: by baseline status for the vaccine arm	507
2.26	RCDF plots for D57 nAb markers: by baseline status for the vaccine arm	507
2.27	RCDF plots for D29 over D1 fold-rise bAb markers: by baseline status for the vaccine arm	508
2.28	RCDF plots for D29 over D1 fold-rise nAb markers: by baseline status for the vaccine arm	508

2.29 RCDF plots for D57 fold-rise over D1 bAb markers: by baseline status for the vaccine arm	509
2.30 RCDF plots for D57 fold-rise over D1 nAb markers: by baseline status for the vaccine arm	509
2.31 RCDF plots for D29 bAb markers: baseline negative vaccine arm	510
2.32 RCDF plots for D29 nAb markers: baseline negative vaccine arm	510
2.33 RCDF plots for D57 bAb markers: baseline negative vaccine arm	511
2.34 RCDF plots for D57 nAb markers: baseline negative vaccine arm	511
2.35 RCDF plots for D29 fold-rise over D1 bAb markers: baseline negative vaccine arm	512
2.36 RCDF plots for D29 fold-rise over D1 nAb markers: baseline negative vaccine arm	512
2.37 RCDF plots for D57 fold-rise over D1 bAb markers: baseline negative vaccine arm	513
2.38 RCDF plots for D57 fold-rise over D1 nAb markers: baseline negative vaccine arm	513
2.39 RCDF plots for D29 bAb markers: baseline positive vaccine arm	514
2.40 RCDF plots for D29 nAb markers: baseline positive vaccine arm	514
2.41 RCDF plots for D57 bAb markers: baseline positive vaccine arm	515
2.42 RCDF plots for D57 nAb markers: baseline positive vaccine arm	515
2.43 RCDF plots for D29 fold-rise over D1 bAb markers: baseline positive vaccine arm	516
2.44 RCDF plots for D29 fold-rise over D1 nAb markers: baseline positive vaccine arm	516
2.45 RCDF plots for D57 fold-rise over D1 bAb markers: baseline positive vaccine arm	517
2.46 RCDF plots for D57 fold-rise over D1 nAb markers: baseline positive vaccine arm	517
2.47 Scatter plots for D29 Ab markers vs. age: baseline negative vaccine arm	518
2.48 Scatter plots for D57 Ab markers vs. age: baseline negative vaccine arm	519
2.49 Scatter plots for D29 Ab markers vs. age: baseline positive vaccine arm	520
2.50 Scatter plots for D57 Ab markers vs. age: baseline positive vaccine arm	521
2.51 Boxplots of D29 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.	522
2.52 Boxplots of D57 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.	523
2.53 Boxplots of D29 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms . . .	524
2.54 Boxplots of D57 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms . . .	525
2.55 Boxplots of D29 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.	526
2.56 Boxplots of D57 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.	527
2.57 Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms . . .	528
2.58 Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms . . .	529
2.59 Boxplots of D29 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.	530
2.60 Boxplots of D57 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.	531

2.61 Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm	532
2.62 Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm	533
2.63 Boxplots of D29 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.	534
2.64 Boxplots of D57 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.	535
2.65 Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative placebo arm	536
2.66 Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative placebo arm	537
2.67 Spaghetti plots of Ab markers over time: baseline negative vaccine + placebo arm	538
2.68 Spaghetti plots of Ab markers over time: baseline positive vaccine + placebo arm	539
2.69 RCDF plots for D29 Ab markers: baseline negative vaccine arm by age groups.	540
2.70 RCDF plots for D57 Ab markers: baseline negative vaccine arm by age groups.	541
2.71 RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.	542
2.72 RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.	543
2.73 RCDF plots for D29 Ab markers: baseline negative vaccine arm by high-risk condition.	544
2.74 RCDF plots for D57 Ab markers: baseline negative vaccine arm by high-risk condition.	545
2.75 RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.	546
2.76 RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.	547
2.77 RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and high-risk condition.	548
2.78 RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and high-risk condition.	549
2.79 RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.	550
2.80 RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.	551
2.81 RCDF plots for D29 Ab markers: baseline negative vaccine arm by sex assigned at birth.	552
2.82 RCDF plots for D57 Ab markers: baseline negative vaccine arm by sex assigned at birth.	553
2.83 RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.	554
2.84 RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.	555
2.85 RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.	556
2.86 RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.	557
2.87 RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.	558
2.88 RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex at birth.	559

2.89 RCDF plots for D29 Ab markers: baseline negative vaccine arm by ethnicity.	560
2.90 RCDF plots for D57 Ab markers: baseline negative vaccine arm by ethnicity.	561
2.91 RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.	562
2.92 RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.	563
2.93 RCDF plots for D29 Ab markers: baseline negative vaccine arm by race.	564
2.94 RCDF plots for D57 Ab markers: baseline negative vaccine arm by race.	565
2.95 RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.	566
2.96 RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.	567
2.97 RCDF plots for D29 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.	568
2.98 RCDF plots for D57 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.	569
2.99 RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.	570
2.100RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.	571
2.101RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.	572
2.102RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.	573
2.103RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.	574
2.104RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.	575
2.105RCDF plots for D29 Ab markers: baseline positive vaccine arm by age groups.	576
2.106RCDF plots for D57 Ab markers: baseline positive vaccine arm by age groups.	577
2.107RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.	578
2.108RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.	579
2.109RCDF plots for D29 Ab markers: baseline positive vaccine arm by high-risk condition.	580
2.110RCDF plots for D57 Ab markers: baseline positive vaccine arm by high-risk condition.	581
2.111RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.	582
2.112RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.	583
2.113RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and high-risk condition.	584
2.114RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and high-risk condition.	585
2.115RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.	586
2.116RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.	587

2.117RCDF plots for D29 Ab markers: baseline positive vaccine arm by sex assigned at birth.	588
2.118RCDF plots for D57 Ab markers: baseline positive vaccine arm by sex assigned at birth.	589
2.119RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.	590
2.120RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.	591
2.121RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.	592
2.122RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.	593
2.123RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.	594
2.124RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.	595
2.125RCDF plots for D29 Ab markers: baseline positive vaccine arm by ethnicity.	596
2.126RCDF plots for D57 Ab markers: baseline positive vaccine arm by ethnicity.	597
2.127RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity. .	598
2.128RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity. .	599
2.129RCDF plots for D29 Ab markers: baseline positive vaccine arm by race.	600
2.130RCDF plots for D57 Ab markers: baseline positive vaccine arm by race.	601
2.131RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race. . .	602
2.132RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race. . .	603
2.133RCDF plots for D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.	604
2.134RCDF plots for D57 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.	605
2.135RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.	606
2.136RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.	607
2.137RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.	608
2.138RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.	609
2.139RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.	610
2.140RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.	611
2.141Boxplots of D29 Ab markers: Baseline negative vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.	612
2.142Boxplots of D57 Ab markers: Baseline negative vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.	613

2.143Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.	614
2.144Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.	615
2.145Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity. . .	616
2.146Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity. . .	617
2.147Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.	618
2.148Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.	619
2.149Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.	620
2.150Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.	621
2.151Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.	622
2.152Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.	623
2.153Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group. . .	625
2.154Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group. . .	626
2.155Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.	627
2.156Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.	628
2.157Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.	629
2.158Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.	630
2.159Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.	631
2.160Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.	632
2.161Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.	633
2.162Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.	634
2.163Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity. . .	635
2.164Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity. . .	636
2.165Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.	637
2.166Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.	638
2.167Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.	639
2.168Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.	640

2.169Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.	641
2.170Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.	642

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Chapter 1

Tabular Description of Immunogenicity Data

1.1 Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Negative Per-Protocol Cohort

Table 1. Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Negative Per-Protocol Cohort

Characteristics	Vaccine (N = 756)	Placebo (N = 124)	Total (N = 880)
Age			
Age < 65	360 (47.6%)	61 (49.2%)	421 (47.8%)
Age ≥ 65	396 (52.4%)	63 (50.8%)	459 (52.2%)
Mean (Range)	58.4 (18.0, 85.0)	61.3 (18.0, 85.0)	58.9 (18.0, 85.0)
BMI			
Mean ± SD	29.9 ± 7.0	30.1 ± 7.1	30.0 ± 7.0
Risk for Severe Covid-19			
At-risk	378 (50.0%)	58 (46.8%)	436 (49.5%)
Not at-risk	378 (50.0%)	66 (53.2%)	444 (50.5%)
Age, Risk for Severe Covid-19			
Age < 65 At-risk	180 (23.8%)	29 (23.4%)	209 (23.8%)
Age < 65 Not at-risk	180 (23.8%)	32 (25.8%)	212 (24.1%)
Age ≥ 65	396 (52.4%)	63 (50.8%)	459 (52.2%)
Sex			
Female	431 (57.0%)	75 (60.5%)	506 (57.5%)
Male	325 (43.0%)	49 (39.5%)	374 (42.5%)
Hispanic or Latino ethnicity			
Hispanic or Latino	115 (15.2%)	16 (12.9%)	131 (14.9%)
Not Hispanic or Latino	617 (81.6%)	105 (84.7%)	722 (82.0%)
Not reported and unknown	24 (3.2%)	3 (2.4%)	27 (3.1%)
Race			
White Non-Hispanic	364 (48.1%)	64 (51.6%)	428 (48.6%)
Black or African American	177 (23.4%)	30 (24.2%)	207 (23.5%)

(continued)

Characteristics	Vaccine (N = 756)	Placebo (N = 124)	Total (N = 880)
Asian	72 (9.5%)	11 (8.9%)	83 (9.4%)
American Indian or Alaska Native	23 (3.0%)	4 (3.2%)	27 (3.1%)
Native Hawaiian or Other Pacific Islander	9 (1.2%)	1 (0.8%)	10 (1.1%)
Multiracial	49 (6.5%)	6 (4.8%)	55 (6.2%)
Other	26 (3.4%)	5 (4.0%)	31 (3.5%)
Not reported and unknown	5 (0.7%)	1 (0.8%)	6 (0.7%)
Communities of Color	392 (51.9%)	60 (48.4%)	452 (51.4%)

This table summarizes the random subcohort, which was randomly sampled from the per-protocol cohort. The sampling was stratified by 24 strata defined by enrollment characteristics: Assigned treatment arm × Baseline SARS-CoV-2 naïve vs. non-naïve status (defined by serostatus and NAAT testing) × Randomization strata (Age < 65 and at-risk, Age < 65 and not at-risk, Age ≥ 65) × Communities of color (Yes/No) defined by White Non-Hispanic vs. all others (following the primary COVE trial paper).

1.2 Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Positive Per-Protocol Cohort

Table 2. Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Positive Per-Protocol Cohort

Characteristics	Vaccine (N = 231)	Placebo (N = 228)	Total (N = 459)
Age			
Age < 65	120 (51.9%)	124 (54.4%)	244 (53.2%)
Age ≥ 65	111 (48.1%)	104 (45.6%)	215 (46.8%)
Mean (Range)	56.4 (18.0, 85.0)	55.7 (18.0, 85.0)	56.1 (18.0, 85.0)
BMI			
Mean ± SD	30.1 ± 7.3	29.6 ± 6.5	29.8 ± 6.9
Risk for Severe Covid-19			
At-risk	109 (47.2%)	112 (49.1%)	221 (48.1%)
Not at-risk	122 (52.8%)	116 (50.9%)	238 (51.9%)
Age, Risk for Severe Covid-19			
Age < 65 At-risk	59 (25.5%)	66 (28.9%)	125 (27.2%)
Age < 65 Not at-risk	61 (26.4%)	58 (25.4%)	119 (25.9%)
Age ≥ 65	111 (48.1%)	104 (45.6%)	215 (46.8%)
Sex			
Female	135 (58.4%)	122 (53.5%)	257 (56.0%)
Male	96 (41.6%)	106 (46.5%)	202 (44.0%)
Hispanic or Latino ethnicity			
Hispanic or Latino	29 (12.6%)	27 (11.8%)	56 (12.2%)
Not Hispanic or Latino	192 (83.1%)	197 (86.4%)	389 (84.7%)
Not reported and unknown	10 (4.3%)	4 (1.8%)	14 (3.1%)
Race			
White Non-Hispanic	123 (53.2%)	122 (53.5%)	245 (53.4%)
Black or African American	47 (20.3%)	43 (18.9%)	90 (19.6%)
Asian	15 (6.5%)	22 (9.6%)	37 (8.1%)
American Indian or Alaska Native	8 (3.5%)	10 (4.4%)	18 (3.9%)
Native Hawaiian or Other Pacific Islander	4 (1.7%)	5 (2.2%)	9 (2.0%)
Multiracial	16 (6.9%)	12 (5.3%)	28 (6.1%)
Other	5 (2.2%)	7 (3.1%)	12 (2.6%)
Not reported and unknown	4 (1.7%)		4 (0.9%)
Communities of Color	108 (46.8%)	106 (46.5%)	214 (46.6%)

This table summarizes the random subcohort, which was randomly sampled from the per-protocol cohort. The sampling was stratified by 24 strata defined by enrollment characteristics: Assigned treatment arm × Baseline SARS-CoV-2 naïve vs. non-naïve status (defined by serostatus and NAAT testing) × Randomization strata (Age < 65 and at-risk, Age < 65 and not at-risk, Age ≥ 65) × Communities of color (Yes/No) defined by White Non-Hispanic vs. all others (following the primary COVE trial paper).

1.3 Sample Sizes of Random Subcohort Strata for Measuring Antibody Markers

Table 3. Sample Sizes of Random Subcohort Strata for Measuring Antibody Markers

Random Subcohort Sample Sizes (N=1339 Participants) (Moderna Trial)												
	Baseline SARS-CoV-2 Negative						Baseline SARS-CoV-2 Positive					
	1	2	3	4	5	6	1	2	3	4	5	6
Vaccine												
Observed	170	226	65	115	68	112	37	74	20	39	26	35
Estimated	720	1655	612	1285	2211	4699	59	172	60	135	215	507
Placebo												
Observed	22	41	12	17	12	20	35	69	26	40	19	39
Estimated	854	1874	640	1445	1922	4394	59	146	47	126	207	476

Demographic covariate strata:

- 1. Age \geq 65 Minority
- 2. Age \geq 65 Non-Minority
- 3. Age $<$ 65 At-risk Minority
- 4. Age $<$ 65 At-risk Non-Minority
- 5. Age $<$ 65 Not At-risk Minority
- 6. Age $<$ 65 Not At-risk Non-Minority

Minority includes Blacks or African Americans, Hispanics or Latinos, American Indians or Alaska Natives, Native Hawaiians, and other Pacific Islanders.

Non-Minority includes all other races with observed race (Asian, Multiracial, White, Other) and observed ethnicity Not Hispanic or Latino. Participants not classifiable as Minority or Non-Minority because of unknown, unreported or missing were not included.

Observed = Numbers of participants sampled into the subcohort within baseline covariate strata.

Estimated = Estimated numbers of participants in the whole per-protocol cohort within baseline covariate strata, calculated using inverse probability weighting.

1.4 Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOQ or $\geq 4 \times$ LLOQ for binding antibody markers

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than $2 \times$ LLOQ	% Greater than $4 \times$ LLOQ
All participants								
	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	756	10775.6/11182 = 96.4% (93.9%, 97.9%)	10304/11182 = 92.1% (88.8%, 94.6%)	9519.2/11182 = 85.1% (81.0%, 88.5%)
	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)	11172.6/11182 = 99.9% (99.4%, 100.0%)
	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	11130.7/11182 = 99.5% (98.3%, 99.9%)	11039.4/11182 = 98.7% (96.7%, 99.5%)
	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	1080.8/1148 = 94.1% (87.6%, 97.4%)	1044.9/1148 = 91.0% (84.5%, 95.0%)
	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	228	1028.8/1061 = 97.0% (92.9%, 98.7%)	969.5/1061 = 91.4% (84.9%, 95.2%)	893.9/1061 = 84.2% (76.4%, 89.8%)
	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	228	1050.1/1061 = 99.0% (92.9%, 99.9%)	1050.1/1061 = 99.0% (92.9%, 99.9%)	1050.1/1061 = 99.0% (92.9%, 99.9%)
	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	228	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)	1020.7/1061 = 96.2% (89.9%, 98.6%)
	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	756	11130.6/11182 = 99.5% (97.7%, 99.9%)	11004.8/11182 = 98.4% (96.3%, 99.3%)	10847.5/11182 = 97.0% (94.6%, 98.4%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	231	1145/1148 = 99.7% (98.1%, 100.0%)	1145/1148 = 99.7% (98.1%, 100.0%)	1130.5/1148 = 98.5% (92.3%, 99.7%)
	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	228	1057.8/1061 = 99.7% (97.9%, 100.0%)	1057.8/1061 = 99.7% (97.9%, 100.0%)	1054.7/1061 = 99.4% (97.7%, 99.9%)
	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	228	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	228	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than $2 \times$ LLOQ	% Greater than $4 \times$ LLOQ
Age								
Age < 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	360	8426.8/8807 = 95.7% (92.5%, 97.5%)	7981.4/8807 = 90.6% (86.4%, 93.6%)	7220.8/8807 = 82.0% (76.8%, 86.2%)
Age < 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	360	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)	8797.6/8807 = 99.9% (99.2%, 100.0%)
Age < 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	360	8807/8807 = 100.0% (100.0%, 100.0%)	8755.7/8807 = 99.4% (97.8%, 99.8%)	8671.7/8807 = 98.5% (95.9%, 99.4%)
Age < 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	120	917/917 = 100.0% (100.0%, 100.0%)	849.8/917 = 92.7% (84.5%, 96.7%)	819.4/917 = 89.4% (81.2%, 94.2%)
Age < 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	124	827.6/856 = 96.7% (91.5%, 98.8%)	768.3/856 = 89.8% (81.7%, 94.5%)	705/856 = 82.4% (72.7%, 89.1%)
Age < 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	124	845.1/856 = 98.7% (91.3%, 99.8%)	845.1/856 = 98.7% (91.3%, 99.8%)	845.1/856 = 98.7% (91.3%, 99.8%)
Age < 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	124	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)	815.7/856 = 95.3% (87.5%, 98.3%)
Age < 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	360	8755.6/8807 = 99.4% (97.0%, 99.9%)	8629.8/8807 = 98.0% (95.4%, 99.1%)	8479.9/8807 = 96.3% (93.2%, 98.0%)
Age < 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	360	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	360	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	120	914/917 = 99.7% (97.7%, 100.0%)	914/917 = 99.7% (97.7%, 100.0%)	899.5/917 = 98.1% (90.3%, 99.6%)
Age < 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	124	852.9/856 = 99.6% (97.4%, 99.9%)	852.9/856 = 99.6% (97.4%, 99.9%)	849.7/856 = 99.3% (97.1%, 99.8%)
Age < 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	124	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	124	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	396	2348.8/2375 = 98.9% (97.0%, 99.6%)	2322.6/2375 = 97.8% (95.6%, 98.9%)	2298.3/2375 = 96.8% (94.4%, 98.2%)
Age ≥ 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2367.7/2375 = 99.7% (97.8%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	225.5/231 = 97.6% (92.6%, 99.3%)
Age ≥ 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	104	201.2/205 = 98.1% (92.7%, 99.6%)	201.2/205 = 98.1% (92.7%, 99.6%)	188.9/205 = 92.2% (84.9%, 96.1%)
Age ≥ 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2367.7/2375 = 99.7% (97.8%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than $2 \times$ LLOQ	% Greater than $4 \times$ LLOQ
Risk for Severe Covid-19								
At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	378	2985.2/3093.8 = 96.5% (93.8%, 98.0%)	2912.2/3093.8 = 94.1% (91.0%, 96.2%)	2768.2/3093.8 = 89.5% (85.6%, 92.4%)
At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3084.3/3093.8 = 99.7% (97.9%, 100.0%)
At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3074.9/3093.8 = 99.4% (97.6%, 99.8%)	3067.6/3093.8 = 99.2% (97.4%, 99.7%)
At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	109	301/301 = 100.0% (100.0%, 100.0%)	285.5/301 = 94.9% (88.3%, 97.8%)	270.1/301 = 89.7% (81.7%, 94.5%)
At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	109	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	109	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	112	247.2/263.4 = 93.8% (86.6%, 97.3%)	234.2/263.4 = 88.9% (80.7%, 93.8%)	227.1/263.4 = 86.2% (77.7%, 91.8%)
At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	112	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	112	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	258.5/263.4 = 98.1% (92.3%, 99.6%)
At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	378	3084.3/3093.8 = 99.7% (97.9%, 100.0%)	3065.5/3093.8 = 99.1% (97.2%, 99.7%)	3024.7/3093.8 = 97.8% (95.3%, 98.9%)
At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	109	298/301 = 99.0% (93.1%, 99.9%)	298/301 = 99.0% (93.1%, 99.9%)	298/301 = 99.0% (93.1%, 99.9%)
At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	109	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	109	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	112	260.3/263.4 = 98.8% (91.8%, 99.8%)	260.3/263.4 = 98.8% (91.8%, 99.8%)	257.1/263.4 = 97.6% (90.8%, 99.4%)
At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	112	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	112	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	378	7790.4/8088.2 = 96.3% (92.7%, 98.2%)	7391.8/8088.2 = 91.4% (86.8%, 94.5%)	6751/8088.2 = 83.5% (77.8%, 87.9%)
Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8055.7/8088.2 = 99.6% (97.2%, 99.9%)	7971.8/8088.2 = 98.6% (95.6%, 99.5%)
Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	795.3/847 = 93.9% (84.4%, 97.8%)	774.8/847 = 91.5% (82.2%, 96.1%)
Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	116	781.5/797.6 = 98.0% (91.0%, 99.6%)	735.3/797.6 = 92.2% (83.0%, 96.6%)	666.8/797.6 = 83.6% (73.2%, 90.5%)
Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	116	786.7/797.6 = 98.6% (90.7%, 99.8%)	786.7/797.6 = 98.6% (90.7%, 99.8%)	786.7/797.6 = 98.6% (90.7%, 99.8%)
Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	116	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	762.2/797.6 = 95.6% (86.8%, 98.6%)
Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	378	8046.3/8088.2 = 99.5% (96.4%, 99.9%)	7939.3/8088.2 = 98.2% (95.1%, 99.3%)	7822.9/8088.2 = 96.7% (93.2%, 98.4%)
Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	832.5/847 = 98.3% (88.5%, 99.8%)
Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	116	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	116	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	116	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than $2 \times$ LLOQ	% Greater than $4 \times$ LLOQ
Age, Risk for Severe Covid-19								
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	1814.6/1897 = 95.7% (91.5%, 97.8%)	1760.5/1897 = 92.8% (87.9%, 95.8%)	1633.5/1897 = 86.1% (80.1%, 90.5%)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)	1887.6/1897 = 99.5% (96.5%, 99.9%)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1897/1897 = 100.0% (100.0%, 100.0%)	1878.2/1897 = 99.0% (96.1%, 99.8%)	1878.2/1897 = 99.0% (96.1%, 99.8%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	59	195/195 = 100.0% (100.0%, 100.0%)	179.5/195 = 92.1% (82.2%, 96.7%)	165.7/195 = 85.0% (73.1%, 92.2%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	66	156.8/173 = 90.6% (79.9%, 95.9%)	143.7/173 = 83.1% (71.2%, 90.7%)	138.8/173 = 80.2% (68.1%, 88.5%)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	66	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	66	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)	168/173 = 97.1% (88.3%, 99.3%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	1887.6/1897 = 99.5% (96.5%, 99.9%)	1868.8/1897 = 98.5% (95.5%, 99.5%)	1835.2/1897 = 96.7% (92.9%, 98.5%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	59	192/195 = 98.5% (89.4%, 99.8%)	192/195 = 98.5% (89.4%, 99.8%)	192/195 = 98.5% (89.4%, 99.8%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	66	169.8/173 = 98.2% (87.6%, 99.8%)	169.8/173 = 98.2% (87.6%, 99.8%)	166.7/173 = 96.4% (86.2%, 99.1%)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	66	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	66	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	6612.1/6910 = 95.7% (91.5%, 97.9%)	6220.9/6910 = 90.0% (84.6%, 93.7%)	5587.4/6910 = 80.9% (74.3%, 86.1%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	6910/6910 = 100.0% (100.0%, 100.0%)	6877.5/6910 = 99.5% (96.7%, 99.9%)	6793.6/6910 = 98.3% (94.8%, 99.5%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	670.3/722 = 92.8% (81.6%, 97.4%)	653.7/722 = 90.5% (79.5%, 95.9%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	58	670.8/683 = 98.2% (87.7%, 99.8%)	624.6/683 = 91.4% (80.5%, 96.5%)	566.2/683 = 82.9% (70.5%, 90.8%)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	58	672.1/683 = 98.4% (89.0%, 99.8%)	672.1/683 = 98.4% (89.0%, 99.8%)	672.1/683 = 98.4% (89.0%, 99.8%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	58	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)	647.7/683 = 94.8% (84.6%, 98.4%)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	6868/6910 = 99.4% (95.7%, 99.9%)	6761.1/6910 = 97.8% (94.3%, 99.2%)	6644.6/6910 = 96.2% (92.1%, 98.2%)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	707.5/722 = 98.0% (86.4%, 99.7%)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	58	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	58	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	58	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	198	1170.6/1196.8 = 97.8% (94.2%, 99.2%)	1151.7/1196.8 = 96.2% (92.1%, 98.2%)	1134.7/1196.8 = 94.8% (90.7%, 97.2%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1189.4/1196.8 = 99.4% (95.7%, 99.9%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	104.4/106 = 98.5% (89.6%, 99.8%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	88.3/90.4 = 97.7% (84.4%, 99.7%)
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1189.4/1196.8 = 99.4% (95.7%, 99.9%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1170.9/1178.2 = 99.4% (95.7%, 99.9%)	1163.6/1178.2 = 98.8% (95.1%, 99.7%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	121.1/125 = 96.9% (87.7%, 99.3%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	58	110.7/114.6 = 96.7% (87.2%, 99.2%)	110.7/114.6 = 96.7% (87.2%, 99.2%)	100.6/114.6 = 87.8% (76.1%, 94.2%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than $2 \times$ LLOQ	% Greater than $4 \times$ LLOQ
Sex								
Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	325	4460.7/4631.6 = 96.3% (91.8%, 98.4%)	4267.1/4631.6 = 92.1% (86.4%, 95.6%)	3972/4631.6 = 85.8% (79.0%, 90.6%)
Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	325	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	325	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4622.2/4631.6 = 99.8% (98.6%, 100.0%)	4538.3/4631.6 = 98.0% (93.1%, 99.4%)
Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	405.7/426.2 = 95.2% (81.5%, 98.9%)	401.8/426.2 = 94.3% (81.9%, 98.4%)
Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	106	462.5/469.5 = 98.5% (95.2%, 99.6%)	423.6/469.5 = 90.2% (78.0%, 96.0%)	370/469.5 = 78.8% (64.8%, 88.3%)
Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	457.3/469.5 = 97.4% (83.3%, 99.6%)
Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	325	4589.6/4631.6 = 99.1% (93.8%, 99.9%)	4505.8/4631.6 = 97.3% (92.4%, 99.1%)	4487.3/4631.6 = 96.9% (92.2%, 98.8%)
Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	325	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	325	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	411.7/426.2 = 96.6% (79.0%, 99.5%)
Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	466.3/469.5 = 99.3% (95.3%, 99.9%)
Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	431	6314.9/6550.4 = 96.4% (92.9%, 98.2%)	6037/6550.4 = 92.2% (87.5%, 95.2%)	5547.1/6550.4 = 84.7% (79.0%, 89.0%)
Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	431	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6541/6550.4 = 99.9% (99.0%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	431	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6508.5/6550.4 = 99.4% (96.9%, 99.9%)	6501.2/6550.4 = 99.2% (97.0%, 99.8%)
Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	675.1/721.8 = 93.5% (84.1%, 97.5%)	643.1/721.8 = 89.1% (80.0%, 94.4%)
Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	122	566.3/591.5 = 95.7% (88.2%, 98.5%)	545.9/591.5 = 92.3% (83.8%, 96.5%)	523.8/591.5 = 88.6% (79.4%, 93.9%)
Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	122	580.6/591.5 = 98.2% (87.7%, 99.8%)	580.6/591.5 = 98.2% (87.7%, 99.8%)	580.6/591.5 = 98.2% (87.7%, 99.8%)
Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	122	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)	563.5/591.5 = 95.3% (85.5%, 98.6%)
Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	431	6541/6550.4 = 99.9% (99.0%, 100.0%)	6499.1/6550.4 = 99.2% (97.0%, 99.8%)	6360.3/6550.4 = 97.1% (93.7%, 98.7%)
Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	431	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	431	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	135	718.8/721.8 = 99.6% (97.0%, 99.9%)	718.8/721.8 = 99.6% (97.0%, 99.9%)	718.8/721.8 = 99.6% (97.0%, 99.9%)
Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)
Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)
Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	122	588.4/591.5 = 99.5% (96.2%, 99.9%)	588.4/591.5 = 99.5% (96.2%, 99.9%)	588.4/591.5 = 99.5% (96.2%, 99.9%)
Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	122	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	122	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than $2 \times$ LLOQ	% Greater than $4 \times$ LLOQ
Age, sex								
Age < 65 Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	215	5019.5/5240.4 = 95.8% (91.3%, 98.0%)	4753.1/5240.4 = 90.7% (84.9%, 94.4%)	4276/5240.4 = 81.6% (74.6%, 87.0%)
Age < 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	215	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5230.9/5240.4 = 99.8% (98.7%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	215	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5198.4/5240.4 = 99.2% (96.2%, 99.8%)	5198.4/5240.4 = 99.2% (96.2%, 99.8%)
Age < 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	544.7/591.4 = 92.1% (80.7%, 97.0%)	514.3/591.4 = 87.0% (75.9%, 93.4%)
Age < 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	68	461/486.3 = 94.8% (85.7%, 98.2%)	440.7/486.3 = 90.6% (80.3%, 95.8%)	426.7/486.3 = 87.7% (76.5%, 94.0%)
Age < 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	68	475.4/486.3 = 97.8% (85.0%, 99.7%)	475.4/486.3 = 97.8% (85.0%, 99.7%)	475.4/486.3 = 97.8% (85.0%, 99.7%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	68	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)	458.3/486.3 = 94.2% (82.4%, 98.3%)
Age < 65 Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	215	5230.9/5240.4 = 99.8% (98.7%, 100.0%)	5189/5240.4 = 99.0% (96.3%, 99.7%)	5050.2/5240.4 = 96.4% (92.1%, 98.4%)
Age < 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	215	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	215	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	72	588.4/591.4 = 99.5% (96.3%, 99.9%)	588.4/591.4 = 99.5% (96.3%, 99.9%)	588.4/591.4 = 99.5% (96.3%, 99.9%)
Age < 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	68	483.2/486.3 = 99.4% (95.3%, 99.9%)	483.2/486.3 = 99.4% (95.3%, 99.9%)	483.2/486.3 = 99.4% (95.3%, 99.9%)
Age < 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	68	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	68	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	145	3407.3/3566.6 = 95.5% (89.6%, 98.1%)	3228.3/3566.6 = 90.5% (83.1%, 94.9%)	2944.8/3566.6 = 82.6% (73.9%, 88.8%)
Age < 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	145	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	145	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3557.2/3566.6 = 99.7% (98.1%, 100.0%)	3473.3/3566.6 = 97.4% (91.1%, 99.3%)
Age < 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	305.1/325.6 = 93.7% (76.1%, 98.6%)	305.1/325.6 = 93.7% (76.1%, 98.6%)
Age < 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	56	366.5/369.7 = 99.1% (93.9%, 99.9%)	327.6/369.7 = 88.6% (72.9%, 95.8%)	278.3/369.7 = 75.3% (57.9%, 87.1%)
Age < 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	357.5/369.7 = 96.7% (79.0%, 99.6%)
Age < 65 Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	145	3524.7/3566.6 = 98.8% (92.0%, 99.8%)	3440.8/3566.6 = 96.5% (90.1%, 98.8%)	3429.6/3566.6 = 96.2% (90.0%, 98.6%)
Age < 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	145	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	145	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	311.1/325.6 = 95.6% (73.2%, 99.4%)
Age < 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	366.5/369.7 = 99.1% (93.9%, 99.9%)
Age < 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	1053.4/1064.9 = 98.9% (95.5%, 99.7%)	1038.7/1064.9 = 97.5% (93.5%, 99.1%)	1027.2/1064.9 = 96.5% (92.1%, 98.4%)
Age ≥ 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	96.7/100.6 = 96.1% (84.8%, 99.1%)
Age ≥ 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	50	96/99.8 = 96.2% (85.4%, 99.1%)	96/99.8 = 96.2% (85.4%, 99.1%)	91.7/99.8 = 91.9% (79.9%, 97.0%)
Age ≥ 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1057.6/1064.9 = 99.3% (95.2%, 99.9%)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	216	1295.4/1310.1 = 98.9% (95.6%, 99.7%)	1283.8/1310.1 = 98.0% (94.7%, 99.3%)	1271.1/1310.1 = 97.0% (93.7%, 98.6%)
Age ≥ 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1302.7/1310.1 = 99.4% (96.1%, 99.9%)
Age ≥ 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	128.8/130.4 = 98.8% (91.5%, 99.8%)
Age ≥ 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	54	105.2/105.2 = 100.0% (100.0%, 100.0%)	105.2/105.2 = 100.0% (100.0%, 100.0%)	97.2/105.2 = 92.4% (80.9%, 97.2%)
Age ≥ 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	54	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 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	54	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 Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	54	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 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	54	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 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	54	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%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than $2 \times$ LLOQ	% Greater than $4 \times$ LLOQ
Hispanic or Latino ethnicity								
Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	115	1191.6/1308 = 91.1% (78.6%, 96.6%)	1154.9/1308 = 88.3% (75.3%, 94.9%)	1058.3/1308 = 80.9% (67.5%, 89.6%)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	115	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)	1298.6/1308 = 99.3% (94.9%, 99.9%)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	115	1308/1308 = 100.0% (100.0%, 100.0%)	1256.7/1308 = 96.1% (85.9%, 99.0%)	1256.7/1308 = 96.1% (85.9%, 99.0%)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	106.5/109.5 = 97.3% (81.1%, 99.7%)	104.9/109.5 = 95.8% (82.3%, 99.1%)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	27	109.5/111.2 = 98.5% (88.6%, 99.8%)	98.6/111.2 = 88.7% (52.9%, 98.2%)	96.8/111.2 = 87.1% (53.9%, 97.5%)
Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	115	1298.6/1308 = 99.3% (94.9%, 99.9%)	1289.2/1308 = 98.6% (94.3%, 99.6%)	1256.7/1308 = 96.1% (85.9%, 99.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	115	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	115	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	29	106.5/109.5 = 97.3% (81.1%, 99.7%)	106.5/109.5 = 97.3% (81.1%, 99.7%)	106.5/109.5 = 97.3% (81.1%, 99.7%)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	617	9304.6/9594.7 = 97.0% (94.4%, 98.4%)	8869.8/9594.7 = 92.4% (88.8%, 95.0%)	8191/9594.7 = 85.4% (80.8%, 89.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	617	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	617	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9503.5/9594.7 = 99.0% (96.6%, 99.7%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	939.6/1000.8 = 93.9% (86.2%, 97.4%)	906.9/1000.8 = 90.6% (83.1%, 95.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	197	912.4/942.9 = 96.8% (92.1%, 98.7%)	864/942.9 = 91.6% (84.8%, 95.6%)	790.2/942.9 = 83.8% (75.4%, 89.7%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	197	932/942.9 = 98.8% (92.1%, 99.8%)	932/942.9 = 98.8% (92.1%, 99.8%)	932/942.9 = 98.8% (92.1%, 99.8%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	197	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)	902.7/942.9 = 95.7% (88.7%, 98.5%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	617	9552.7/9594.7 = 99.6% (96.9%, 99.9%)	9436.3/9594.7 = 98.3% (95.9%, 99.4%)	9311.6/9594.7 = 97.0% (94.3%, 98.5%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	617	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	617	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	986.3/1000.8 = 98.6% (90.2%, 99.8%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	197	939.8/942.9 = 99.7% (97.6%, 100.0%)	939.8/942.9 = 99.7% (97.6%, 100.0%)	936.6/942.9 = 99.3% (97.4%, 99.8%)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	197	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	197	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	269.9/279.3 = 96.6% (76.7%, 99.6%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	34.7/37.7 = 92.0% (47.1%, 99.3%)	33.1/37.7 = 87.8% (49.0%, 98.2%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

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

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than $2 \times$ LLOQ	% Greater than $4 \times$ LLOQ
Race								
White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	364	6102/6329.2 = 96.4% (92.5%, 98.3%)	5802.1/6329.2 = 91.7% (86.6%, 94.9%)	5361.3/6329.2 = 84.7% (78.7%, 89.3%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6279.9/6329.2 = 99.2% (95.8%, 99.9%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	649/695.9 = 93.3% (82.1%, 97.7%)	632.8/695.9 = 90.9% (80.7%, 96.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	122	580.2/604 = 96.1% (88.4%, 98.7%)	546.4/604 = 90.5% (80.6%, 95.6%)	498.1/604 = 82.5% (71.1%, 90.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	576.4/604 = 95.4% (85.1%, 98.7%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	364	6287.2/6329.2 = 99.3% (95.4%, 99.9%)	6287.2/6329.2 = 99.3% (95.4%, 99.9%)	6215.6/6329.2 = 98.2% (94.9%, 99.4%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	681.4/695.9 = 97.9% (86.2%, 99.7%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	600.8/604 = 99.5% (96.3%, 99.9%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	177	2076.3/2131.8 = 97.4% (91.2%, 99.3%)	2001.8/2131.8 = 93.9% (86.0%, 97.5%)	1881.2/2131.8 = 88.2% (79.0%, 93.7%)
Black or African American	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	182.7/200 = 91.4% (75.9%, 97.3%)	166.2/200 = 83.1% (64.3%, 93.1%)
Black or African American	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Black or African American	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	43	153.6/157.2 = 97.7% (90.7%, 99.5%)	139.1/157.2 = 88.5% (65.6%, 96.9%)	126.5/157.2 = 80.5% (55.9%, 93.1%)
Black or African American	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	43	146.3/157.2 = 93.1% (61.9%, 99.1%)	146.3/157.2 = 93.1% (61.9%, 99.1%)	146.3/157.2 = 93.1% (61.9%, 99.1%)
Black or African American	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	43	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	144.5/157.2 = 91.9% (64.0%, 98.6%)
Black or African American	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2057.4/2131.8 = 96.5% (88.6%, 99.0%)	2057.4/2131.8 = 96.5% (88.6%, 99.0%)
Black or African American	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Black or African American	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	43	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	43	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	43	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	72	1100.4/1142.4 = 96.3% (83.6%, 99.3%)	1007.5/1142.4 = 88.2% (73.2%, 95.3%)	890/1142.4 = 77.9% (61.6%, 88.6%)
Asian	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1100.4/1142.4 = 96.3% (83.6%, 99.3%)	1058.5/1142.4 = 92.7% (77.0%, 97.9%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Asian	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	22	111.9/115.1 = 97.3% (80.1%, 99.7%)	111.9/115.1 = 97.3% (80.1%, 99.7%)	111.9/115.1 = 97.3% (80.1%, 99.7%)
Asian	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	22	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	22	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	72	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1091/1142.4 = 95.5% (79.4%, 99.2%)	1037.9/1142.4 = 90.9% (74.7%, 97.1%)
Asian	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Asian	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	22	111.9/115.1 = 97.3% (80.1%, 99.7%)	111.9/115.1 = 97.3% (80.1%, 99.7%)	111.9/115.1 = 97.3% (80.1%, 99.7%)
Asian	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	22	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	22	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	278.4/287.8 = 96.7% (77.1%, 99.6%)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	20.6/22.2 = 92.8% (42.8%, 99.6%)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	25.2/36.1 = 69.8% (4.8%, 99.1%)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	49	532.7/605.1 = 88.0% (65.2%, 96.7%)	532.7/605.1 = 88.0% (65.2%, 96.7%)	486.5/605.1 = 80.4% (56.4%, 92.9%)
Multiracial	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	16	90/90 = 100.0% (100.0%, 100.0%)	87/90 = 96.7% (73.7%, 99.7%)	87/90 = 96.7% (73.7%, 99.7%)
Multiracial	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	16	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	16	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Multiracial	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	12	47.1/48.8 = 96.5% (70.0%, 99.7%)	47.1/48.8 = 96.5% (70.0%, 99.7%)	45.3/48.8 = 92.8% (66.2%, 98.8%)
Multiracial	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	572.5/605.1 = 94.6% (69.0%, 99.3%)
Multiracial	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	16	87/90 = 96.7% (73.7%, 99.7%)	87/90 = 96.7% (73.7%, 99.7%)	87/90 = 96.7% (73.7%, 99.7%)
Multiracial	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	16	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	16	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Multiracial	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	246.4/278.9 = 88.3% (46.6%, 98.5%)
Other	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	16.8/18.4 = 91.3% (6.8%, 99.9%)
Other	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	41.3/52.2 = 79.1% (9.5%, 99.3%)	39.2/52.2 = 75.1% (10.8%, 98.7%)
Other	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Other	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Other	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Other	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Other	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	16.9/26.4 = 64.3% (4.9%, 98.4%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

Table 4i. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOQ or $\geq 4 \times$ LLOQ for binding antibody markers by Communities of color

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than $2 \times$ LLOQ	% Greater than $4 \times$ LLOQ
Communities of color								
Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	392	4673.6/4852.8 = 96.3% (92.4%, 98.2%)	4501.9/4852.8 = 92.8% (87.8%, 95.8%)	4157.9/4852.8 = 85.7% (79.6%, 90.2%)
Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	392	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4843.4/4852.8 = 99.8% (98.6%, 100.0%)
Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	392	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4801.5/4852.8 = 98.9% (96.0%, 99.7%)	4759.5/4852.8 = 98.1% (94.1%, 99.4%)
Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	431.9/452.1 = 95.5% (88.4%, 98.4%)	412.1/452.1 = 91.2% (81.8%, 95.9%)
Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	106	448.5/457 = 98.2% (94.9%, 99.3%)	423.1/457 = 92.6% (82.1%, 97.2%)	395.7/457 = 86.6% (74.6%, 93.4%)
Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	106	446.1/457 = 97.6% (84.3%, 99.7%)	446.1/457 = 97.6% (84.3%, 99.7%)	446.1/457 = 97.6% (84.3%, 99.7%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	106	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)	444.3/457 = 97.2% (85.5%, 99.5%)
Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	392	4843.4/4852.8 = 99.8% (98.6%, 100.0%)	4717.6/4852.8 = 97.2% (93.1%, 98.9%)	4632/4852.8 = 95.4% (90.7%, 97.8%)
Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	392	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	392	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	108	449.1/452.1 = 99.3% (95.3%, 99.9%)	449.1/452.1 = 99.3% (95.3%, 99.9%)	449.1/452.1 = 99.3% (95.3%, 99.9%)
Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	106	453.9/457 = 99.3% (95.2%, 99.9%)	453.9/457 = 99.3% (95.2%, 99.9%)	453.9/457 = 99.3% (95.2%, 99.9%)
Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	106	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	106	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	364	6102/6329.2 = 96.4% (92.5%, 98.3%)	5802.1/6329.2 = 91.7% (86.6%, 94.9%)	5361.3/6329.2 = 84.7% (78.7%, 89.3%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6279.9/6329.2 = 99.2% (95.8%, 99.9%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	649/695.9 = 93.3% (82.1%, 97.7%)	632.8/695.9 = 90.9% (80.7%, 96.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	122	580.2/604 = 96.1% (88.4%, 98.7%)	546.4/604 = 90.5% (80.6%, 95.6%)	498.1/604 = 82.5% (71.1%, 90.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	576.4/604 = 95.4% (85.1%, 98.7%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	364	6287.2/6329.2 = 99.3% (95.4%, 99.9%)	6287.2/6329.2 = 99.3% (95.4%, 99.9%)	6215.6/6329.2 = 98.2% (94.9%, 99.4%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	681.4/695.9 = 97.9% (86.2%, 99.7%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	600.8/604 = 99.5% (96.3%, 99.9%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

Table 4j. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOQ or $\geq 4 \times$ LLOQ for binding antibody markers by Age, Communities of color

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than $2 \times$ LLOQ	% Greater than $4 \times$ LLOQ
Age, Communities of color								
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	176	3628.3/3796 = 95.6% (90.5%, 98.0%)	3468.2/3796 = 91.4% (85.0%, 95.2%)	3141.1/3796 = 82.7% (75.0%, 88.4%)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	176	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)	3786.6/3796 = 99.8% (98.2%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	176	3796/3796 = 100.0% (100.0%, 100.0%)	3744.6/3796 = 98.6% (94.9%, 99.7%)	3702.7/3796 = 97.5% (92.5%, 99.2%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	347.3/367.6 = 94.5% (85.6%, 98.0%)	330.8/367.6 = 90.0% (78.3%, 95.7%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	61	370.1/376.8 = 98.2% (94.2%, 99.5%)	344.7/376.8 = 91.5% (78.5%, 96.9%)	321.1/376.8 = 85.2% (70.4%, 93.3%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	365.9/376.8 = 97.1% (81.0%, 99.6%)	365.9/376.8 = 97.1% (81.0%, 99.6%)	365.9/376.8 = 97.1% (81.0%, 99.6%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)	364.1/376.8 = 96.6% (82.5%, 99.4%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	176	3786.6/3796 = 99.8% (98.2%, 100.0%)	3660.8/3796 = 96.4% (91.2%, 98.6%)	3575.1/3796 = 94.2% (88.2%, 97.2%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	176	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	176	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	60	364.6/367.6 = 99.2% (94.1%, 99.9%)	364.6/367.6 = 99.2% (94.1%, 99.9%)	364.6/367.6 = 99.2% (94.1%, 99.9%)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	61	373.7/376.8 = 99.2% (94.1%, 99.9%)	373.7/376.8 = 99.2% (94.1%, 99.9%)	373.7/376.8 = 99.2% (94.1%, 99.9%)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	61	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	61	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	184	4798.5/5011 = 95.8% (90.8%, 98.1%)	4513.2/5011 = 90.1% (83.7%, 94.1%)	4079.8/5011 = 81.4% (73.9%, 87.2%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)	4969.1/5011 = 99.2% (94.2%, 99.9%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	502.5/549.4 = 91.5% (77.4%, 97.1%)	488.7/549.4 = 88.9% (76.0%, 95.3%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	63	457.5/479.2 = 95.5% (85.4%, 98.7%)	423.6/479.2 = 88.4% (76.0%, 94.8%)	383.9/479.2 = 80.1% (65.8%, 89.4%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	451.6/479.2 = 94.2% (81.4%, 98.4%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	184	4969.1/5011 = 99.2% (94.2%, 99.9%)	4969.1/5011 = 99.2% (94.2%, 99.9%)	4904.8/5011 = 97.9% (93.6%, 99.3%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	535/549.4 = 97.4% (82.6%, 99.7%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	476/479.2 = 99.3% (95.3%, 99.9%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	216	1045.3/1056.9 = 98.9% (95.5%, 99.7%)	1033.7/1056.9 = 97.8% (94.1%, 99.2%)	1016.8/1056.9 = 96.2% (92.4%, 98.1%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	81.4/84.6 = 96.2% (85.6%, 99.1%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	45	78.5/80.2 = 97.9% (85.7%, 99.7%)	78.5/80.2 = 97.9% (85.7%, 99.7%)	74.7/80.2 = 93.2% (80.1%, 97.9%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	1303.5/1318.1 = 98.9% (95.6%, 99.7%)	1288.8/1318.1 = 97.8% (94.2%, 99.2%)	1281.5/1318.1 = 97.2% (93.5%, 98.8%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1310.8/1318.1 = 99.4% (96.1%, 99.9%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	144.1/146.4 = 98.4% (89.1%, 99.8%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	59	122.7/124.8 = 98.3% (88.4%, 99.8%)	122.7/124.8 = 98.3% (88.4%, 99.8%)	114.3/124.8 = 91.5% (80.8%, 96.5%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1310.8/1318.1 = 99.4% (96.1%, 99.9%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% Greater than 2 × LLOQ	% Greater than 4 × LLOQ
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

1.5 Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers

Table 5a. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by All participants

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
All participants								
	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	756	10775.6/11182 = 96.4% (93.9%, 97.9%)	11172.6/11182 = 99.9% (99.4%, 100.0%)	11172.6/11182 = 99.9% (99.4%, 100.0%)
	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	228	1028.8/1061 = 97.0% (92.9%, 98.7%)	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)
	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	228	1050.1/1061 = 99.0% (92.9%, 99.9%)	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)
	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	228	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	756	11130.6/11182 = 99.5% (97.7%, 99.9%)	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	231	1145/1148 = 99.7% (98.1%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	124	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	228	1057.8/1061 = 99.7% (97.9%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	228	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	228	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

Table 5b. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Age

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age								
Age < 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	360	8426.8/8807 = 95.7% (92.5%, 97.5%)	8797.6/8807 = 99.9% (99.2%, 100.0%)	8797.6/8807 = 99.9% (99.2%, 100.0%)
Age < 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	360	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	360	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	120	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	124	827.6/856 = 96.7% (91.5%, 98.8%)	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	124	845.1/856 = 98.7% (91.3%, 99.8%)	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	124	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	360	8755.6/8807 = 99.4% (97.0%, 99.9%)	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	360	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	360	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	120	914/917 = 99.7% (97.7%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	124	852.9/856 = 99.6% (97.4%, 99.9%)	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	124	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	124	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	396	2348.8/2375 = 98.9% (97.0%, 99.6%)	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age \geq 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)
Age \geq 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)
Age \geq 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)
Age \geq 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	104	201.2/205 = 98.1% (92.7%, 99.6%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)
Age \geq 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)
Age \geq 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	63	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)	0/2728 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age \geq 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)
Age \geq 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

Table 5c. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Risk for Severe Covid-19								
At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	378	2985.2/3093.8 = 96.5% (93.8%, 98.0%)	3084.3/3093.8 = 99.7% (97.9%, 100.0%)	3084.3/3093.8 = 99.7% (97.9%, 100.0%)
At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	109	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	109	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	109	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	112	247.2/263.4 = 93.8% (86.6%, 97.3%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	112	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	112	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	378	3084.3/3093.8 = 99.7% (97.9%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	109	298/301 = 99.0% (93.1%, 99.9%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	109	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	109	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	112	260.3/263.4 = 98.8% (91.8%, 99.8%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	112	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	112	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	378	7790.4/8088.2 = 96.3% (92.7%, 98.2%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	116	781.5/797.6 = 98.0% (91.0%, 99.6%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	116	786.7/797.6 = 98.6% (90.7%, 99.8%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	116	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	378	8046.3/8088.2 = 99.5% (96.4%, 99.9%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)	0/7787.4 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	116	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	116	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	116	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

Table 5d. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Age, Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age, Risk for Severe Covid-19								
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	1814.6/1897 = 95.7% (91.5%, 97.8%)	1887.6/1897 = 99.5% (96.5%, 99.9%)	1887.6/1897 = 99.5% (96.5%, 99.9%)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	59	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	66	156.8/173 = 90.6% (79.9%, 95.9%)	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	66	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	66	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	1887.6/1897 = 99.5% (96.5%, 99.9%)	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	59	192/195 = 98.5% (89.4%, 99.8%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	66	169.8/173 = 98.2% (87.6%, 99.8%)	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	66	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	66	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	6612.1/6910 = 95.7% (91.5%, 97.9%)	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	58	670.8/683 = 98.2% (87.7%, 99.8%)	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	58	672.1/683 = 98.4% (89.0%, 99.8%)	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	58	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	6868/6910 = 99.4% (95.7%, 99.9%)	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	58	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	58	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	58	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	198	1170.6/1196.8 = 97.8% (94.2%, 99.2%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	58	110.7/114.6 = 96.7% (87.2%, 99.2%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	34	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

Table 5e. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Sex								
Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	325	4460.7/4631.6 = 96.3% (91.8%, 98.4%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	325	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	325	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	106	462.5/469.5 = 98.5% (95.2%, 99.6%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	325	4589.6/4631.6 = 99.1% (93.8%, 99.9%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	325	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	325	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	49	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	431	6314.9/6550.4 = 96.4% (92.9%, 98.2%)	6541/6550.4 = 99.9% (99.0%, 100.0%)	6541/6550.4 = 99.9% (99.0%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	431	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	431	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	122	566.3/591.5 = 95.7% (88.2%, 98.5%)	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)
Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	122	580.6/591.5 = 98.2% (87.7%, 99.8%)	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)
Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	122	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	431	6541/6550.4 = 99.9% (99.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	431	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	431	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	135	718.8/721.8 = 99.6% (97.0%, 99.9%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)
Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)
Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	122	588.4/591.5 = 99.5% (96.2%, 99.9%)	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	122	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	122	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

Table 5f. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Age, sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age, sex								
Age < 65 Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	215	5019.5/5240.4 = 95.8% (91.3%, 98.0%)	5230.9/5240.4 = 99.8% (98.7%, 100.0%)	5230.9/5240.4 = 99.8% (98.7%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	215	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	215	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	68	461/486.3 = 94.8% (85.7%, 98.2%)	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	68	475.4/486.3 = 97.8% (85.0%, 99.7%)	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	68	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	215	5230.9/5240.4 = 99.8% (98.7%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	215	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	215	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	72	588.4/591.4 = 99.5% (96.3%, 99.9%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	68	483.2/486.3 = 99.4% (95.3%, 99.9%)	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	68	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	68	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	145	3407.3/3566.6 = 95.5% (89.6%, 98.1%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	145	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	145	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	56	369.7/369.7 = 100.0% (93.9%, 99.9%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	145	3524.7/3566.6 = 98.8% (92.0%, 99.8%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	145	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	145	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	1053.4/1064.9 = 98.9% (95.5%, 99.7%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	50	96/99.8 = 96.2% (85.4%, 99.1%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	21	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	216	1295.4/1310.1 = 98.9% (95.6%, 99.7%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	54	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 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	54	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 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	54	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 Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age \geq 65 Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	54	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 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	54	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 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	54	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%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

Table 5g. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Hispanic or Latino ethnicity

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Hispanic or Latino ethnicity								
Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	115	1191.6/1308 = 91.1% (78.6%, 96.6%)	1298.6/1308 = 99.3% (94.9%, 99.9%)	1298.6/1308 = 99.3% (94.9%, 99.9%)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	115	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	115	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	27	109.5/111.2 = 98.5% (88.6%, 99.8%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	115	1298.6/1308 = 99.3% (94.9%, 99.9%)	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	115	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	115	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	29	106.5/109.5 = 97.3% (81.1%, 99.7%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	617	9304.6/9594.7 = 97.0% (94.4%, 98.4%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	617	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	617	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	197	912.4/942.9 = 96.8% (92.1%, 98.7%)	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	197	932/942.9 = 98.8% (92.1%, 99.8%)	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	197	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	617	9552.7/9594.7 = 99.6% (96.9%, 99.9%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	617	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	617	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	105	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	197	939.8/942.9 = 99.7% (97.6%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	197	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	197	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

Table 5h. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Race

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Race								
White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	364	6102/6329.2 = 96.4% (92.5%, 98.3%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	122	580.2/604 = 96.1% (88.4%, 98.7%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	364	6287.2/6329.2 = 99.3% (95.4%, 99.9%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	177	2076.3/2131.8 = 97.4% (91.2%, 99.3%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Black or African American	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	43	153.6/157.2 = 97.7% (90.7%, 99.5%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	43	146.3/157.2 = 93.1% (61.9%, 99.1%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	43	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Black or African American	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	43	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	43	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	43	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	72	1100.4/1142.4 = 96.3% (83.6%, 99.3%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Asian	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	22	111.9/115.1 = 97.3% (80.1%, 99.7%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	22	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	22	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	72	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Asian	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	22	111.9/115.1 = 97.3% (80.1%, 99.7%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	22	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	22	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	49	532.7/605.1 = 88.0% (65.2%, 96.7%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	16	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	16	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	16	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Multiracial	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	12	47.1/48.8 = 96.5% (70.0%, 99.7%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	16	87/90 = 96.7% (73.7%, 99.7%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	16	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	16	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Multiracial	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Other	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Other	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Other	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Other	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Other	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

Table 5i. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Communities of color

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Communities of color								
Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	392	4673.6/4852.8 = 96.3% (92.4%, 98.2%)	4843.4/4852.8 = 99.8% (98.6%, 100.0%)	4843.4/4852.8 = 99.8% (98.6%, 100.0%)
Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	392	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	392	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	106	448.5/457 = 98.2% (94.9%, 99.3%)	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	106	446.1/457 = 97.6% (84.3%, 99.7%)	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	106	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	392	4843.4/4852.8 = 99.8% (98.6%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	392	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	392	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	108	449.1/452.1 = 99.3% (95.3%, 99.9%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	106	453.9/457 = 99.3% (95.2%, 99.9%)	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	106	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	106	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	364	6102/6329.2 = 96.4% (92.5%, 98.3%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	122	580.2/604 = 96.1% (88.4%, 98.7%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	364	6287.2/6329.2 = 99.3% (95.4%, 99.9%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

Table 5j. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Age, Communities of color

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age, Communities of color								
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	176	3628.3/3796 = 95.6% (90.5%, 98.0%)	3786.6/3796 = 99.8% (98.2%, 100.0%)	3786.6/3796 = 99.8% (98.2%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	176	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	176	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	61	370.1/376.8 = 98.2% (94.2%, 99.5%)	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	365.9/376.8 = 97.1% (81.0%, 99.6%)	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	176	3786.6/3796 = 99.8% (98.2%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	176	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	176	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	60	364.6/367.6 = 99.2% (94.1%, 99.9%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	61	373.7/376.8 = 99.2% (94.1%, 99.9%)	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	61	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	61	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	184	4798.5/5011 = 95.8% (90.8%, 98.1%)	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	63	457.5/479.2 = 95.5% (85.4%, 98.7%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	184	4969.1/5011 = 99.2% (94.2%, 99.9%)	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	216	1045.3/1056.9 = 98.9% (95.5%, 99.7%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	45	78.5/80.2 = 97.9% (85.7%, 99.7%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	1303.5/1318.1 = 98.9% (95.6%, 99.7%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	59	122.7/124.8 = 98.3% (88.4%, 99.8%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 1.43, 3.43, 1.80 IU/ml for N, RBD, Spike, respectively.

1.6 Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers

Table 6a. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by All participants

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
All participants								
	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	756	11163.2/11182 = 99.8% (99.3%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)	11163.2/11182 = 99.8% (99.3%, 100.0%)
	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	231	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	124	0/11129 = 0.0% (0.0%, 0.0%)	91.4/11129 = 0.8% (0.2%, 3.2%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	228	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	756	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)	11182/11182 = 100.0% (100.0%, 100.0%)
	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	231	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)	1148/1148 = 100.0% (100.0%, 100.0%)
	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	124	45.7/11129 = 0.4% (0.1%, 2.9%)	84.5/11129 = 0.8% (0.2%, 3.1%)	0/11129 = 0.0% (0.0%, 0.0%)
	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	228	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)	1061/1061 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 18.50, 14.30 for pseudovirus-nAb ID50, ID80, respectively.

Table 6b. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age								
Age < 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	360	8788.2/8807 = 99.8% (99.2%, 99.9%)	8807/8807 = 100.0% (100.0%, 100.0%)	8788.2/8807 = 99.8% (99.2%, 99.9%)
Age < 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	120	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	124	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	360	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)	8807/8807 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	120	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)	917/917 = 100.0% (100.0%, 100.0%)
Age < 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	61	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)	0/8401 = 0.0% (0.0%, 0.0%)
Age < 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	124	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)	856/856 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	63	0/2728 = 0.0% (0.0%, 0.0%)	91.4/2728 = 3.4% (0.8%, 12.8%)	0/2728 = 0.0% (0.0%, 0.0%)
Age ≥ 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	396	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)	2375/2375 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	111	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)	231/231 = 100.0% (100.0%, 100.0%)
Age ≥ 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	63	45.7/2728 = 1.7% (0.2%, 11.5%)	84.5/2728 = 3.1% (0.7%, 12.1%)	0/2728 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age \geq 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	104	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)	205/205 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 18.50, 14.30 for pseudovirus-nAb ID50, ID80, respectively.

Table 6c. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Risk for Severe Covid-19								
At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	378	3074.9/3093.8 = 99.4% (97.6%, 99.8%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3074.9/3093.8 = 99.4% (97.6%, 99.8%)
At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	109	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	58	0/3341.6 = 0.0% (0.0%, 0.0%)	45.7/3341.6 = 1.4% (0.2%, 9.5%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	112	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	378	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)	3093.8/3093.8 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	109	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)	301/301 = 100.0% (100.0%, 100.0%)
At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	58	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)	0/3341.6 = 0.0% (0.0%, 0.0%)
At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	112	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)	263.4/263.4 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	378	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	66	0/7787.4 = 0.0% (0.0%, 0.0%)	45.7/7787.4 = 0.6% (0.1%, 4.2%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	116	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	378	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)	8088.2/8088.2 = 100.0% (100.0%, 100.0%)
Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	122	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)	847/847 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	66	45.7/7787.4 = 0.6% (0.1%, 4.2%)	84.5/7787.4 = 1.1% (0.3%, 4.4%)	0/7787.4 = 0.0% (0.0%, 0.0%)
Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	116	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)	797.6/797.6 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 18.50, 14.30 for pseudovirus-nAb ID50, ID80, respectively.

Table 6d. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, Risk for Severe Covid-19

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age, Risk for Severe Covid-19								
Age < 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	180	1878.2/1897 = 99.0% (96.1%, 99.8%)	1897/1897 = 100.0% (100.0%, 100.0%)	1878.2/1897 = 99.0% (96.1%, 99.8%)
Age < 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	59	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	66	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	180	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)	1897/1897 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	59	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)	195/195 = 100.0% (100.0%, 100.0%)
Age < 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	29	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)	0/2085 = 0.0% (0.0%, 0.0%)
Age < 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	66	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)	173/173 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	180	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	58	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	180	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)	6910/6910 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	61	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)	722/722 = 100.0% (100.0%, 100.0%)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	32	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)	0/6316 = 0.0% (0.0%, 0.0%)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	58	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)	683/683 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	29	0/1256.6 = 0.0% (0.0%, 0.0%)	45.7/1256.6 = 3.6% (0.5%, 23.7%)	0/1256.6 = 0.0% (0.0%, 0.0%)
Age ≥ 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	198	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)	1196.8/1196.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	50	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)	106/106 = 100.0% (100.0%, 100.0%)
Age ≥ 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	29	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)	0/1256.6 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	46	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)	90.4/90.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	34	0/1471.4 = 0.0% (0.0%, 0.0%)	45.7/1471.4 = 3.1% (0.4%, 20.5%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	198	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)	1178.2/1178.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	61	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)	125/125 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	34	45.7/1471.4 = 3.1% (0.4%, 20.5%)	84.5/1471.4 = 5.7% (1.3%, 21.7%)	0/1471.4 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	58	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)	114.6/114.6 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 18.50, 14.30 for pseudovirus-nAb ID50, ID80, respectively.

Table 6e. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Sex								
Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	325	4622.2/4631.6 = 99.8% (98.6%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4622.2/4631.6 = 99.8% (98.6%, 100.0%)
Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	49	0/4684.8 = 0.0% (0.0%, 0.0%)	91.4/4684.8 = 2.0% (0.5%, 7.8%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	325	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)	4631.6/4631.6 = 100.0% (100.0%, 100.0%)
Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	96	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)	426.2/426.2 = 100.0% (100.0%, 100.0%)
Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	49	45.7/4684.8 = 1.0% (0.1%, 7.1%)	84.5/4684.8 = 1.8% (0.4%, 7.4%)	0/4684.8 = 0.0% (0.0%, 0.0%)
Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	106	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)	469.5/469.5 = 100.0% (100.0%, 100.0%)
Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	431	6541/6550.4 = 99.9% (99.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6541/6550.4 = 99.9% (99.0%, 100.0%)
Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)
Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)
Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	122	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	431	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)	6550.4/6550.4 = 100.0% (100.0%, 100.0%)
Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	135	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)	721.8/721.8 = 100.0% (100.0%, 100.0%)
Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	75	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)	0/6444.2 = 0.0% (0.0%, 0.0%)

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Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	122	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)	591.5/591.5 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 18.50, 14.30 for pseudovirus-nAb ID50, ID80, respectively.

Table 6f. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, sex

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age, sex								
Age < 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	215	5230.9/5240.4 = 99.8% (98.7%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5230.9/5240.4 = 99.8% (98.7%, 100.0%)
Age < 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	68	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	215	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)	5240.4/5240.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	72	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)	591.4/591.4 = 100.0% (100.0%, 100.0%)
Age < 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	33	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)	0/4634.7 = 0.0% (0.0%, 0.0%)
Age < 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	68	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)	486.3/486.3 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	145	3557.2/3566.6 = 99.7% (98.1%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3557.2/3566.6 = 99.7% (98.1%, 100.0%)
Age < 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	145	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)	3566.6/3566.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	48	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)	325.6/325.6 = 100.0% (100.0%, 100.0%)
Age < 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	28	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)	0/3766.3 = 0.0% (0.0%, 0.0%)
Age < 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	56	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)	369.7/369.7 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	21	0/918.5 = 0.0% (0.0%, 0.0%)	91.4/918.5 = 10.0% (2.3%, 34.6%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	180	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)	1064.9/1064.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	48	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)	100.6/100.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	21	45.7/918.5 = 5.0% (0.6%, 31.4%)	84.5/918.5 = 9.2% (2.0%, 33.0%)	0/918.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	50	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)	99.8/99.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	54	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 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	216	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)	1310.1/1310.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	63	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)	130.4/130.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	42	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)	0/1809.5 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	54	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%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 18.50, 14.30 for pseudovirus-nAb ID50, ID80, respectively.

Table 6g. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Hispanic or Latino ethnicity

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Hispanic or Latino ethnicity								
Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	115	1289.2/1308 = 98.6% (94.3%, 99.6%)	1308/1308 = 100.0% (100.0%, 100.0%)	1289.2/1308 = 98.6% (94.3%, 99.6%)
Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	115	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)	1308/1308 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	29	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)	109.5/109.5 = 100.0% (100.0%, 100.0%)
Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	16	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)	0/1329.4 = 0.0% (0.0%, 0.0%)
Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	27	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)	111.2/111.2 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	617	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	105	0/9547.2 = 0.0% (0.0%, 0.0%)	91.4/9547.2 = 1.0% (0.2%, 3.8%)	0/9547.2 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	197	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	617	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)	9594.7/9594.7 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	192	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)	1000.8/1000.8 = 100.0% (100.0%, 100.0%)
Not Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	105	45.7/9547.2 = 0.5% (0.1%, 3.4%)	84.5/9547.2 = 0.9% (0.2%, 3.6%)	0/9547.2 = 0.0% (0.0%, 0.0%)
Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	197	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)	942.9/942.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	24	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)	279.3/279.3 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	10	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)	37.7/37.7 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	3	0/252.3 = 0.0%	0/252.3 = 0.0%	0/252.3 = 0.0%
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	4	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)	6.9/6.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
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Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOQ) with detectable ID50 neutralization titer above the assay LLOQ, or as participants with baseline values above the LLOQ with a 4-fold increase in ID50.

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 18.50, 14.30 for pseudovirus-nAb ID50, ID80, respectively.

Table 6h. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Race

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Race								
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	64	0/6433.2 = 0.0% (0.0%, 0.0%)	91.4/6433.2 = 1.4% (0.3%, 5.6%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	64	45.7/6433.2 = 0.7% (0.1%, 5.1%)	45.7/6433.2 = 0.7% (0.1%, 5.1%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Black or African American	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	30	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	43	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	177	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)	2131.8/2131.8 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	47	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)	200/200 = 100.0% (100.0%, 100.0%)
Black or African American	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	30	0/1858.4 = 0.0% (0.0%, 0.0%)	38.8/1858.4 = 2.1% (0.3%, 15.1%)	0/1858.4 = 0.0% (0.0%, 0.0%)
Black or African American	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	43	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)	157.2/157.2 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	72	1133/1142.4 = 99.2% (94.1%, 99.9%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1133/1142.4 = 99.2% (94.1%, 99.9%)
Asian	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	22	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	72	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)	1142.4/1142.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Asian	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	15	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)	64.9/64.9 = 100.0% (100.0%, 100.0%)
Asian	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	11	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)	0/1083.1 = 0.0% (0.0%, 0.0%)
Asian	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	22	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)	115.1/115.1 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)
American Indian or Alaska Native	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	23	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)	287.8/287.8 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	8	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)	22.2/22.2 = 100.0% (100.0%, 100.0%)
American Indian or Alaska Native	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	4	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)	0/533.8 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
American Indian or Alaska Native	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	10	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	9	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)	99.9/99.9 = 100.0% (100.0%, 100.0%)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	4	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)	13.1/13.1 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	1	0/38.8 = 0.0%	0/38.8 = 0.0%	0/38.8 = 0.0%
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	5	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)	36.1/36.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	16	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	49	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)	605.1/605.1 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	16	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)	90/90 = 100.0% (100.0%, 100.0%)
Multiracial	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	6	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)	0/404.7 = 0.0% (0.0%, 0.0%)
Multiracial	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	12	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)	48.8/48.8 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)
Other	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Other	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	26	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)	278.9/278.9 = 100.0% (100.0%, 100.0%)
Other	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	5	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)	18.4/18.4 = 100.0% (100.0%, 100.0%)
Other	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5	0/510.1 = 0.0%	0/510.1 = 0.0%	0/510.1 = 0.0%
Other	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	7	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)	52.2/52.2 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	5	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)	26.4/26.4 = 100.0% (100.0%, 100.0%)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	4	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%	14.5/14.5 = 100.0%
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	1	0/160.2 = 0.0%	0/160.2 = 0.0%	0/160.2 = 0.0%

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 18.50, 14.30 for pseudovirus-nAb ID50, ID80, respectively.

Table 6i. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Communities of color

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Communities of color								
Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	392	4834/4852.8 = 99.6% (98.5%, 99.9%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4834/4852.8 = 99.6% (98.5%, 99.9%)
Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	60	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	106	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	392	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)	4852.8/4852.8 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	108	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)	452.1/452.1 = 100.0% (100.0%, 100.0%)
Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	60	0/4695.8 = 0.0% (0.0%, 0.0%)	38.8/4695.8 = 0.8% (0.1%, 6.0%)	0/4695.8 = 0.0% (0.0%, 0.0%)
Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	106	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)	457/457 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	64	0/6433.2 = 0.0% (0.0%, 0.0%)	91.4/6433.2 = 1.4% (0.3%, 5.6%)	0/6433.2 = 0.0% (0.0%, 0.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	364	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)	6329.2/6329.2 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	123	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)	695.9/695.9 = 100.0% (100.0%, 100.0%)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	64	45.7/6433.2 = 0.7% (0.1%, 5.1%)	45.7/6433.2 = 0.7% (0.1%, 5.1%)	0/6433.2 = 0.0% (0.0%, 0.0%)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	122	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)	604/604 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 18.50, 14.30 for pseudovirus-nAb ID50, ID80, respectively.

Table 6j. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, Communities of color

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age, Communities of color								
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	176	3777.2/3796 = 99.5% (98.0%, 99.9%)	3796/3796 = 100.0% (100.0%, 100.0%)	3777.2/3796 = 99.5% (98.0%, 99.9%)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	61	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	176	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)	3796/3796 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	60	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)	367.6/367.6 = 100.0% (100.0%, 100.0%)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	30	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)	0/3476.1 = 0.0% (0.0%, 0.0%)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	61	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)	376.8/376.8 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	184	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	184	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)	5011/5011 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	60	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)	549.4/549.4 = 100.0% (100.0%, 100.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	31	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)	0/4924.9 = 0.0% (0.0%, 0.0%)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	63	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)	479.2/479.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	30	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	216	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)	1056.9/1056.9 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	48	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)	84.6/84.6 = 100.0% (100.0%, 100.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	30	0/1219.7 = 0.0% (0.0%, 0.0%)	38.8/1219.7 = 3.2% (0.4%, 21.6%)	0/1219.7 = 0.0% (0.0%, 0.0%)
Age ≥ 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	45	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)	80.2/80.2 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Responder	% 2-Fold Rise	% 4-Fold Rise
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	33	0/1508.3 = 0.0% (0.0%, 0.0%)	91.4/1508.3 = 6.1% (1.4%, 22.5%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	180	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)	1318.1/1318.1 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	63	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)	146.4/146.4 = 100.0% (100.0%, 100.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	33	45.7/1508.3 = 3.0% (0.4%, 20.2%)	45.7/1508.3 = 3.0% (0.4%, 20.2%)	0/1508.3 = 0.0% (0.0%, 0.0%)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	59	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)	124.8/124.8 = 100.0% (100.0%, 100.0%)

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

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

LLOQ = 18.50, 14.30 for pseudovirus-nAb ID50, ID80, respectively.

1.7 Geometric mean titers (GMTs) and geometric mean concentrations (GMCs)

Table 7a. 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)	756	0.05 (0.05, 0.05)
	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	756	0.80 (0.80, 0.80)
	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	756	0.15 (0.15, 0.15)
	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	756	5.00 (5.00, 5.00)
	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	756	5.00 (5.00, 5.00)
	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	231	0.05 (0.05, 0.05)
	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	231	0.80 (0.80, 0.80)
	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	231	0.15 (0.15, 0.15)
	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	231	5.00 (5.00, 5.00)
	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	231	5.00 (5.00, 5.00)
	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	124	0.05 (0.05, 0.05)
	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	124	0.80 (0.80, 0.80)
	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	124	0.15 (0.15, 0.15)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	124	5.00 (5.00, 5.00)
	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	124	5.04 (4.98, 5.09)
	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	228	0.05 (0.05, 0.05)
	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	228	0.80 (0.80, 0.80)
	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	228	0.15 (0.15, 0.15)
	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	228	5.00 (5.00, 5.00)
	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	228	5.00 (5.00, 5.00)
	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	756	43.64 (36.28, 52.49)
	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	756	478.03 (411.95, 554.72)
	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	756	307.44 (272.14, 347.33)
	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	756	258.62 (237.59, 281.50)
	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	756	59.02 (54.61, 63.78)
	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	231	63.91 (47.18, 86.56)
	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	231	810.65 (591.10, 1111.74)
	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	231	417.37 (328.15, 530.85)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	231	414.35 (361.56, 474.85)
	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	231	95.76 (85.02, 107.86)
	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	124	0.05 (0.05, 0.05)
	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	124	0.80 (0.80, 0.80)
	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	124	0.15 (0.15, 0.15)
	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	124	5.03 (4.99, 5.08)
	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	124	5.07 (4.99, 5.15)
	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	228	32.03 (23.64, 43.39)
	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	228	382.17 (291.58, 500.90)
	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	228	175.33 (140.54, 218.73)
	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	228	179.81 (157.59, 205.16)
	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	228	40.53 (35.93, 45.72)
	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	756	442.90 (356.61, 550.08)
	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	756	15525.12 (13089.55, 18413.87)
	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	756	9083.71 (7831.59, 10536.04)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	756	5826.31 (5396.16, 6290.75)
	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	756	1338.84 (1244.61, 1440.20)
	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	231	1033.97 (697.29, 1533.23)
	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	231	34994.74 (26856.69, 45598.75)
	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	231	25909.49 (19949.97, 33649.26)
	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	231	14829.72 (12948.92, 16983.72)
	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	231	3003.67 (2625.21, 3436.68)
	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	124	0.05 (0.05, 0.05)
	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	124	0.80 (0.80, 0.80)
	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	124	0.15 (0.15, 0.15)
	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	124	5.04 (4.98, 5.10)
	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	124	5.04 (4.99, 5.09)
	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	228	346.46 (241.30, 497.44)
	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	228	10781.25 (7871.72, 14766.19)
	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	228	7223.90 (5651.04, 9234.54)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	228	4475.50 (3810.59, 5256.43)
	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	228	1062.31 (942.02, 1197.95)

MOCK

Table 7b. 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)	360	0.05 (0.05, 0.05)
Age < 65	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	360	0.80 (0.80, 0.80)
Age < 65	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	360	0.15 (0.15, 0.15)
Age < 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	360	5.00 (5.00, 5.00)
Age < 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	360	5.00 (5.00, 5.00)
Age < 65	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	120	0.05 (0.05, 0.05)
Age < 65	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	0.80 (0.80, 0.80)
Age < 65	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	0.15 (0.15, 0.15)
Age < 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	120	5.00 (5.00, 5.00)
Age < 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	120	5.00 (5.00, 5.00)
Age < 65	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)
Age < 65	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)
Age < 65	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)
Age < 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)
Age < 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	61	5.03 (4.97, 5.09)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	124	0.05 (0.05, 0.05)
Age < 65	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	124	0.80 (0.80, 0.80)
Age < 65	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	124	0.15 (0.15, 0.15)
Age < 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	124	5.00 (5.00, 5.00)
Age < 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	124	5.00 (5.00, 5.00)
Age < 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	360	33.78 (26.87, 42.48)
Age < 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	360	362.44 (301.46, 435.76)
Age < 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	360	235.04 (202.15, 273.29)
Age < 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	360	231.65 (208.53, 257.33)
Age < 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	360	54.06 (49.10, 59.52)
Age < 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	120	50.95 (35.13, 73.90)
Age < 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	639.45 (433.70, 942.79)
Age < 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	313.11 (233.61, 419.65)
Age < 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	120	371.78 (314.71, 439.20)
Age < 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	120	88.61 (76.66, 102.42)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)
Age < 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)
Age < 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)
Age < 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)
Age < 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	61	5.00 (5.00, 5.00)
Age < 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	124	26.89 (18.62, 38.84)
Age < 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	124	313.09 (225.99, 433.74)
Age < 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	124	136.35 (104.62, 177.70)
Age < 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	124	166.35 (141.88, 195.05)
Age < 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	124	38.76 (33.51, 44.82)
Age < 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	360	322.63 (246.67, 421.99)
Age < 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	360	10910.50 (8835.21, 13473.25)
Age < 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	360	6333.94 (5273.03, 7608.29)
Age < 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	360	5200.88 (4730.59, 5717.92)
Age < 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	360	1256.20 (1147.77, 1374.86)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	120	717.83 (443.04, 1163.03)
Age < 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	25755.07 (18709.39, 35454.06)
Age < 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	19178.36 (13955.11, 26356.61)
Age < 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	120	13237.51 (11221.17, 15616.16)
Age < 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	120	2805.65 (2379.69, 3307.85)
Age < 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)
Age < 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)
Age < 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)
Age < 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)
Age < 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	61	5.00 (5.00, 5.00)
Age < 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	124	277.04 (179.11, 428.53)
Age < 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	124	8015.42 (5484.82, 11713.59)
Age < 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	124	5494.34 (4090.86, 7379.33)
Age < 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	124	4157.91 (3421.13, 5053.37)
Age < 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	124	1009.68 (874.13, 1166.24)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	396	0.05 (0.05, 0.05)
Age \geq 65	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	396	0.80 (0.80, 0.80)
Age \geq 65	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	396	0.15 (0.15, 0.15)
Age \geq 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	396	5.00 (5.00, 5.00)
Age \geq 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	396	5.00 (5.00, 5.00)
Age \geq 65	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	111	0.05 (0.05, 0.05)
Age \geq 65	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	111	0.80 (0.80, 0.80)
Age \geq 65	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	111	0.15 (0.15, 0.15)
Age \geq 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	111	5.00 (5.00, 5.00)
Age \geq 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	111	5.00 (5.00, 5.00)
Age \geq 65	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)
Age \geq 65	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)
Age \geq 65	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)
Age \geq 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)
Age \geq 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	63	5.06 (4.94, 5.19)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	104	0.05 (0.05, 0.05)
Age \geq 65	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	104	0.80 (0.80, 0.80)
Age \geq 65	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	104	0.15 (0.15, 0.15)
Age \geq 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	104	5.00 (5.00, 5.00)
Age \geq 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	104	5.00 (5.00, 5.00)
Age \geq 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	396	112.78 (94.24, 134.97)
Age \geq 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	396	1334.32 (1150.75, 1547.17)
Age \geq 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	396	832.20 (735.53, 941.57)
Age \geq 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	396	389.06 (357.89, 422.94)
Age \geq 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	396	81.72 (75.60, 88.33)
Age \geq 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	111	157.06 (118.61, 207.97)
Age \geq 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	111	2078.88 (1595.78, 2708.23)
Age \geq 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	111	1306.33 (1045.26, 1632.61)
Age \geq 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	111	637.20 (559.05, 726.29)
Age \geq 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	111	130.32 (114.44, 148.40)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)
Age \geq 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)
Age \geq 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)
Age \geq 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	63	5.13 (4.95, 5.32)
Age \geq 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	63	5.28 (4.95, 5.63)
Age \geq 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	104	66.45 (48.61, 90.84)
Age \geq 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	104	878.67 (648.97, 1189.67)
Age \geq 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	104	500.99 (390.66, 642.49)
Age \geq 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	104	248.84 (214.55, 288.61)
Age \geq 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	104	48.88 (42.45, 56.29)
Age \geq 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	396	1434.05 (1153.94, 1782.14)
Age \geq 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	396	57424.48 (48305.52, 68264.88)
Age \geq 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	396	34588.43 (29833.16, 40101.66)
Age \geq 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	396	8877.08 (8188.96, 9623.03)
Age \geq 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	396	1695.64 (1570.15, 1831.16)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	111	4402.15 (3113.03, 6225.12)
Age \geq 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	111	118175.62 (87587.00, 159446.92)
Age \geq 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	111	85524.41 (66310.18, 110306.20)
Age \geq 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	111	23277.99 (20229.41, 26785.99)
Age \geq 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	111	3937.57 (3429.06, 4521.50)
Age \geq 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)
Age \geq 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)
Age \geq 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)
Age \geq 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	63	5.16 (4.92, 5.42)
Age \geq 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	63	5.15 (4.94, 5.37)
Age \geq 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	104	881.27 (585.70, 1325.97)
Age \geq 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	104	37174.80 (26889.43, 51394.39)
Age \geq 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	104	22649.99 (17454.82, 29391.43)
Age \geq 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	104	6085.85 (5156.80, 7182.27)
Age \geq 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	104	1313.40 (1126.90, 1530.76)

Table 7c. 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)	378	0.05 (0.05, 0.05)
At-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	0.80 (0.80, 0.80)
At-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	0.15 (0.15, 0.15)
At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	378	5.00 (5.00, 5.00)
At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	378	5.00 (5.00, 5.00)
At-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	109	0.05 (0.05, 0.05)
At-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	109	0.80 (0.80, 0.80)
At-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	109	0.15 (0.15, 0.15)
At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	109	5.00 (5.00, 5.00)
At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	109	5.00 (5.00, 5.00)
At-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	58	0.05 (0.05, 0.05)
At-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	58	0.80 (0.80, 0.80)
At-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	58	0.15 (0.15, 0.15)
At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	58	5.00 (5.00, 5.00)
At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	58	5.13 (4.95, 5.32)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
At-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	112	0.05 (0.05, 0.05)
At-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	112	0.80 (0.80, 0.80)
At-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	112	0.15 (0.15, 0.15)
At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	112	5.00 (5.00, 5.00)
At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	112	5.00 (5.00, 5.00)
At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	378	59.28 (48.71, 72.13)
At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	619.80 (526.73, 729.32)
At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	375.02 (325.86, 431.60)
At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	378	287.14 (261.84, 314.88)
At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	378	65.59 (60.47, 71.13)
At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	109	74.07 (52.28, 104.94)
At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	109	904.26 (673.82, 1213.50)
At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	109	468.34 (362.40, 605.25)
At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	109	436.83 (371.53, 513.61)
At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	109	100.57 (87.22, 115.96)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	58	0.05 (0.05, 0.05)
At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	58	0.80 (0.80, 0.80)
At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	58	0.15 (0.15, 0.15)
At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	58	5.05 (4.95, 5.15)
At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	58	5.00 (5.00, 5.00)
At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	112	33.12 (23.95, 45.80)
At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	112	441.26 (334.12, 582.76)
At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	112	196.77 (152.52, 253.86)
At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	112	183.54 (157.83, 213.45)
At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	112	41.54 (36.21, 47.65)
At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	378	658.36 (521.57, 831.02)
At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	22341.77 (18573.14, 26875.09)
At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	12390.79 (10490.47, 14635.35)
At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	378	6580.38 (6011.76, 7202.78)
At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	378	1320.45 (1213.71, 1436.57)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	109	1620.01 (1001.61, 2620.20)
At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	109	39497.25 (27525.38, 56676.17)
At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	109	28099.59 (20656.04, 38225.48)
At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	109	15043.24 (13016.25, 17385.89)
At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	109	3015.42 (2586.08, 3516.04)
At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	58	0.05 (0.05, 0.05)
At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	58	0.80 (0.80, 0.80)
At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	58	0.15 (0.15, 0.15)
At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	58	5.00 (5.00, 5.00)
At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	58	5.00 (5.00, 5.00)
At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	112	373.98 (250.49, 558.33)
At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	112	13175.28 (9638.84, 18009.23)
At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	112	8459.96 (6305.79, 11350.04)
At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	112	4401.65 (3729.38, 5195.11)
At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	112	1122.35 (977.19, 1289.07)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	378	0.05 (0.05, 0.05)
Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	0.80 (0.80, 0.80)
Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	0.15 (0.15, 0.15)
Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	378	5.00 (5.00, 5.00)
Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	378	5.00 (5.00, 5.00)
Not at-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)
Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)
Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)
Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)
Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)
Not at-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	66	0.05 (0.05, 0.05)
Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0.80 (0.80, 0.80)
Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0.15 (0.15, 0.15)
Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	66	5.00 (5.00, 5.00)
Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	66	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not at-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	116	0.05 (0.05, 0.05)
Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	116	0.80 (0.80, 0.80)
Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	116	0.15 (0.15, 0.15)
Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	116	5.00 (5.00, 5.00)
Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	116	5.00 (5.00, 5.00)
Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	378	38.82 (30.40, 49.57)
Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	432.83 (355.47, 527.03)
Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	284.94 (242.60, 334.67)
Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	378	248.47 (222.14, 277.92)
Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	378	56.68 (51.14, 62.82)
Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	122	60.64 (40.94, 89.82)
Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	122	779.77 (514.53, 1181.75)
Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	122	400.63 (292.59, 548.55)
Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	122	406.65 (341.08, 484.82)
Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	122	94.11 (80.74, 109.69)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	66	0.05 (0.05, 0.05)
Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0.80 (0.80, 0.80)
Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0.15 (0.15, 0.15)
Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	66	5.03 (4.98, 5.08)
Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	66	5.10 (4.98, 5.21)
Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	116	31.68 (21.45, 46.77)
Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	116	364.44 (257.23, 516.35)
Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	116	168.77 (127.18, 223.97)
Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	116	178.59 (150.91, 211.35)
Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	116	40.21 (34.48, 46.89)
Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	378	380.59 (285.70, 507.00)
Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	13507.29 (10771.24, 16938.33)
Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	8066.57 (6628.23, 9817.03)
Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	378	5561.29 (5029.53, 6149.26)
Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	378	1345.94 (1223.10, 1481.12)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	122	881.47 (531.12, 1462.94)
Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	122	33521.46 (23944.76, 46928.34)
Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	122	25173.01 (17947.02, 35308.40)
Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	122	14754.58 (12362.99, 17608.82)
Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	122	2999.50 (2519.64, 3570.75)
Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	66	0.05 (0.05, 0.05)
Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0.80 (0.80, 0.80)
Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0.15 (0.15, 0.15)
Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	66	5.06 (4.97, 5.14)
Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	66	5.05 (4.98, 5.13)
Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	116	337.82 (212.59, 536.81)
Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	116	10090.22 (6720.72, 15149.05)
Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	116	6856.66 (5014.27, 9376.01)
Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	116	4500.16 (3658.74, 5535.09)
Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	116	1043.19 (894.99, 1215.93)

Table 7d. 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)	180	0.05 (0.05, 0.05)
Age < 65 At-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)
Age < 65 At-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)
Age < 65 At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)
Age < 65 At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)
Age < 65 At-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	59	0.05 (0.05, 0.05)
Age < 65 At-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	0.80 (0.80, 0.80)
Age < 65 At-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	0.15 (0.15, 0.15)
Age < 65 At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	59	5.00 (5.00, 5.00)
Age < 65 At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	59	5.00 (5.00, 5.00)
Age < 65 At-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)
Age < 65 At-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)
Age < 65 At-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)
Age < 65 At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)
Age < 65 At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	29	5.12 (4.88, 5.37)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 At-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	66	0.05 (0.05, 0.05)
Age < 65 At-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	66	0.80 (0.80, 0.80)
Age < 65 At-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	66	0.15 (0.15, 0.15)
Age < 65 At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	66	5.00 (5.00, 5.00)
Age < 65 At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	66	5.00 (5.00, 5.00)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	43.18 (32.88, 56.70)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	397.20 (318.03, 496.08)
Age < 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	244.00 (201.11, 296.04)
Age < 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	180	249.03 (219.07, 283.09)
Age < 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	180	61.01 (54.52, 68.27)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	59	49.48 (30.89, 79.26)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	593.37 (410.70, 857.30)
Age < 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	281.08 (204.19, 386.92)
Age < 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	59	353.44 (284.96, 438.37)
Age < 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	59	90.49 (74.65, 109.69)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 At-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)
Age < 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)
Age < 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)
Age < 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	29	5.00 (5.00, 5.00)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	66	20.23 (13.05, 31.37)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	66	277.22 (197.27, 389.57)
Age < 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	66	113.16 (83.62, 153.13)
Age < 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	66	151.28 (123.98, 184.58)
Age < 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	66	36.32 (30.38, 43.43)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	437.34 (317.47, 602.46)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	14227.35 (11021.14, 18366.29)
Age < 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	7015.69 (5620.04, 8757.92)
Age < 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	180	5504.77 (4862.36, 6232.06)
Age < 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	180	1180.39 (1048.33, 1329.10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	59	856.91 (445.10, 1649.76)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	21274.96 (13374.99, 33841.05)
Age < 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	16930.25 (11380.64, 25186.06)
Age < 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	59	12072.87 (10060.75, 14487.41)
Age < 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	59	2581.92 (2116.19, 3150.16)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)
Age < 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)
Age < 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)
Age < 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	29	5.00 (5.00, 5.00)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	66	239.76 (144.58, 397.60)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	66	7739.61 (5270.36, 11365.76)
Age < 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	66	4667.11 (3221.43, 6761.58)
Age < 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	66	3710.81 (3012.73, 4570.64)
Age < 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	66	995.94 (840.65, 1179.90)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	180	0.05 (0.05, 0.05)
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)
Age < 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)
Age < 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	61	5.00 (5.00, 5.00)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	32	0.05 (0.05, 0.05)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	32	0.80 (0.80, 0.80)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	32	0.15 (0.15, 0.15)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	32	5.00 (5.00, 5.00)
Age < 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	32	5.00 (5.00, 5.00)

(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)	58	0.05 (0.05, 0.05)
Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	58	0.80 (0.80, 0.80)
Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	58	0.15 (0.15, 0.15)
Age < 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	58	5.00 (5.00, 5.00)
Age < 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	58	5.00 (5.00, 5.00)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	31.58 (23.82, 41.88)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	353.45 (281.75, 443.39)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	232.64 (193.41, 279.82)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	180	227.09 (199.55, 258.43)
Age < 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	180	52.29 (46.44, 58.88)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	61	51.36 (32.59, 80.93)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	652.49 (402.55, 1057.62)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	322.37 (224.50, 462.89)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	61	376.89 (307.49, 461.96)
Age < 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	61	88.11 (73.85, 105.11)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	32	0.05 (0.05, 0.05)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	32	0.80 (0.80, 0.80)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	32	0.15 (0.15, 0.15)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	32	5.00 (5.00, 5.00)
Age < 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	32	5.00 (5.00, 5.00)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	58	28.90 (18.48, 45.20)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	58	322.88 (216.58, 481.36)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	58	142.94 (103.50, 197.42)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	58	170.40 (140.50, 206.66)
Age < 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	58	39.40 (33.03, 47.00)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	296.78 (213.23, 413.08)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	10143.71 (7824.64, 13150.12)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	6158.65 (4915.01, 7716.97)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	180	5120.43 (4560.11, 5749.59)
Age < 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	180	1277.84 (1144.36, 1426.90)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	61	684.30 (380.56, 1230.46)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	27119.28 (18434.91, 39894.70)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	19835.17 (13439.47, 29274.49)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	61	13570.89 (11066.69, 16641.76)
Age < 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	61	2869.33 (2344.30, 3511.94)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	32	0.05 (0.05, 0.05)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	32	0.80 (0.80, 0.80)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	32	0.15 (0.15, 0.15)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	32	5.00 (5.00, 5.00)
Age < 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	32	5.00 (5.00, 5.00)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	58	287.37 (168.91, 488.93)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	58	8086.82 (5077.55, 12879.58)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	58	5726.20 (4005.09, 8186.91)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	58	4279.46 (3370.96, 5432.81)
Age < 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	58	1013.19 (850.11, 1207.55)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 At-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	198	0.05 (0.05, 0.05)
Age \geq 65 At-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	0.80 (0.80, 0.80)
Age \geq 65 At-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	0.15 (0.15, 0.15)
Age \geq 65 At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	198	5.00 (5.00, 5.00)
Age \geq 65 At-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	198	5.00 (5.00, 5.00)
Age \geq 65 At-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	50	0.05 (0.05, 0.05)
Age \geq 65 At-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	50	0.80 (0.80, 0.80)
Age \geq 65 At-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	50	0.15 (0.15, 0.15)
Age \geq 65 At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	50	5.00 (5.00, 5.00)
Age \geq 65 At-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	50	5.00 (5.00, 5.00)
Age \geq 65 At-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)
Age \geq 65 At-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)
Age \geq 65 At-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)
Age \geq 65 At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)
Age \geq 65 At-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	29	5.14 (4.87, 5.42)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 At-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	46	0.05 (0.05, 0.05)
Age \geq 65 At-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	46	0.80 (0.80, 0.80)
Age \geq 65 At-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	46	0.15 (0.15, 0.15)
Age \geq 65 At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	46	5.00 (5.00, 5.00)
Age \geq 65 At-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	46	5.00 (5.00, 5.00)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	198	97.96 (75.55, 127.03)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	1254.78 (1012.74, 1554.66)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	741.21 (620.31, 885.69)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	198	359.84 (318.54, 406.51)
Age \geq 65 At-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	198	73.56 (65.89, 82.13)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	50	155.59 (101.32, 238.92)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	50	1962.80 (1265.65, 3043.97)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	50	1198.00 (851.66, 1685.20)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	50	644.98 (524.64, 792.94)
Age \geq 65 At-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	50	122.14 (101.21, 147.40)

(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)	29	0.05 (0.05, 0.05)
Age \geq 65 At-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)
Age \geq 65 At-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)
Age \geq 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	29	5.13 (4.88, 5.40)
Age \geq 65 At-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	29	5.00 (5.00, 5.00)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	46	84.99 (60.96, 118.48)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	46	1073.54 (717.69, 1605.83)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	46	566.90 (402.05, 799.34)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	46	265.66 (219.29, 321.83)
Age \geq 65 At-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	46	53.70 (44.26, 65.17)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	198	1259.06 (918.90, 1725.14)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	45686.59 (35971.73, 58025.14)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	30525.75 (24376.05, 38226.94)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	198	8732.03 (7730.16, 9863.76)
Age \geq 65 At-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	198	1577.27 (1415.83, 1757.12)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	50	5227.81 (3005.56, 9093.15)
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	50	123273.66 (77134.92, 197010.57)
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	50	71364.83 (47795.27, 106557.38)
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	50	22546.66 (18323.34, 27743.40)
Age \geq 65 At-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	50	4011.87 (3209.05, 5015.53)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)
Age \geq 65 At-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	29	5.00 (5.00, 5.00)
Age \geq 65 At-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	46	875.25 (477.82, 1603.24)
Age \geq 65 At-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	46	36447.15 (23445.94, 56657.78)
Age \geq 65 At-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	46	26390.54 (18738.38, 37167.59)
Age \geq 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	46	6101.45 (4731.84, 7867.49)
Age \geq 65 At-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	46	1410.55 (1120.58, 1775.55)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	198	0.05 (0.05, 0.05)
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	0.80 (0.80, 0.80)
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	0.15 (0.15, 0.15)
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	198	5.00 (5.00, 5.00)
Age \geq 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	198	5.00 (5.00, 5.00)
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)
Age \geq 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	61	5.00 (5.00, 5.00)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	34	0.05 (0.05, 0.05)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	34	0.80 (0.80, 0.80)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	34	0.15 (0.15, 0.15)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	34	5.00 (5.00, 5.00)
Age \geq 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	34	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	58	0.05 (0.05, 0.05)
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	58	0.80 (0.80, 0.80)
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	58	0.15 (0.15, 0.15)
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	58	5.00 (5.00, 5.00)
Age \geq 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	58	5.00 (5.00, 5.00)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	198	130.13 (101.70, 166.52)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	1420.27 (1158.54, 1741.14)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	936.05 (789.94, 1109.19)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	198	421.16 (376.07, 471.67)
Age \geq 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	198	90.93 (81.62, 101.29)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	61	158.31 (109.35, 229.20)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	2182.68 (1590.05, 2996.19)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	1405.84 (1049.89, 1882.47)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	61	630.68 (533.79, 745.14)
Age \geq 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	61	137.68 (115.13, 164.64)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	34	0.05 (0.05, 0.05)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	34	0.80 (0.80, 0.80)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	34	0.15 (0.15, 0.15)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	34	5.14 (4.87, 5.41)
Age \geq 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	34	5.53 (4.92, 6.21)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	58	54.72 (33.57, 89.19)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	58	750.12 (486.05, 1157.68)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	58	454.41 (319.55, 646.19)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	58	236.31 (190.12, 293.74)
Age \geq 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	58	45.38 (37.18, 55.39)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	198	1636.70 (1214.70, 2205.29)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	72438.06 (56696.18, 92550.73)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	39268.88 (32484.16, 47470.68)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	198	9026.88 (8122.85, 10031.54)
Age \geq 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	198	1824.97 (1637.22, 2034.26)

(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)	61	3805.03 (2468.93, 5864.17)
Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	114018.04 (77600.41, 167526.34)
Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	99712.09 (72401.97, 137323.63)
Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	61	23916.72 (19779.87, 28918.78)
Age \geq 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	61	3875.65 (3264.89, 4600.67)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	34	0.05 (0.05, 0.05)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	34	0.80 (0.80, 0.80)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	34	0.15 (0.15, 0.15)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	34	5.31 (4.86, 5.79)
Age \geq 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	34	5.29 (4.90, 5.71)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	58	886.05 (508.08, 1545.18)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	58	37759.61 (23803.97, 59897.06)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	58	20074.92 (13744.82, 29320.31)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	58	6073.55 (4882.70, 7554.83)
Age \geq 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	58	1241.44 (1012.38, 1522.32)

Table 7e. 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)	325	0.05 (0.05, 0.05)
Male	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	325	0.80 (0.80, 0.80)
Male	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	325	0.15 (0.15, 0.15)
Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	325	5.00 (5.00, 5.00)
Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	325	5.00 (5.00, 5.00)
Male	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	96	0.05 (0.05, 0.05)
Male	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	96	0.80 (0.80, 0.80)
Male	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	96	0.15 (0.15, 0.15)
Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	96	5.00 (5.00, 5.00)
Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	96	5.00 (5.00, 5.00)
Male	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	49	0.05 (0.05, 0.05)
Male	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	49	0.80 (0.80, 0.80)
Male	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	49	0.15 (0.15, 0.15)
Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	49	5.00 (5.00, 5.00)
Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	49	5.04 (4.96, 5.11)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Male	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	106	0.05 (0.05, 0.05)
Male	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	106	0.80 (0.80, 0.80)
Male	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	106	0.15 (0.15, 0.15)
Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	106	5.00 (5.00, 5.00)
Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	106	5.00 (5.00, 5.00)
Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	325	35.73 (27.60, 46.26)
Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	325	408.17 (328.51, 507.15)
Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	325	268.04 (222.09, 323.50)
Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	325	234.63 (208.87, 263.58)
Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	325	55.67 (49.52, 62.58)
Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	96	82.92 (53.27, 129.07)
Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	96	916.03 (597.66, 1403.97)
Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	96	551.61 (386.90, 786.43)
Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	96	454.94 (367.86, 562.63)
Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	96	102.09 (83.27, 125.16)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	49	0.05 (0.05, 0.05)
Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	49	0.80 (0.80, 0.80)
Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	49	0.15 (0.15, 0.15)
Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	49	5.08 (4.97, 5.19)
Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	49	5.00 (5.00, 5.00)
Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	106	24.60 (17.02, 35.55)
Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	106	316.27 (226.83, 440.98)
Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	106	150.42 (112.72, 200.73)
Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	106	165.07 (140.09, 194.49)
Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	106	39.87 (33.21, 47.88)
Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	325	380.77 (277.84, 521.84)
Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	325	13533.28 (11029.52, 16605.41)
Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	325	7771.48 (6160.25, 9804.13)
Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	325	5527.99 (4908.12, 6226.14)
Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	325	1280.14 (1145.14, 1431.05)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	96	1473.17 (729.72, 2974.04)
Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	96	45491.95 (29036.52, 71272.93)
Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	96	31608.49 (21476.07, 46521.39)
Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	96	17069.85 (13630.63, 21376.84)
Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	96	3179.99 (2632.21, 3841.77)
Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	49	0.05 (0.05, 0.05)
Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	49	0.80 (0.80, 0.80)
Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	49	0.15 (0.15, 0.15)
Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	49	5.09 (4.95, 5.24)
Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	49	5.04 (4.96, 5.12)
Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	106	245.91 (143.25, 422.16)
Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	106	8699.01 (5973.03, 12669.08)
Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	106	5456.50 (3910.97, 7612.80)
Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	106	4419.86 (3593.90, 5435.63)
Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	106	1023.05 (873.98, 1197.54)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Female	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	431	0.05 (0.05, 0.05)
Female	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	431	0.80 (0.80, 0.80)
Female	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	431	0.15 (0.15, 0.15)
Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	431	5.00 (5.00, 5.00)
Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	431	5.00 (5.00, 5.00)
Female	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	135	0.05 (0.05, 0.05)
Female	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	135	0.80 (0.80, 0.80)
Female	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	135	0.15 (0.15, 0.15)
Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	135	5.00 (5.00, 5.00)
Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	135	5.00 (5.00, 5.00)
Female	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	75	0.05 (0.05, 0.05)
Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	75	0.80 (0.80, 0.80)
Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	75	0.15 (0.15, 0.15)
Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	75	5.00 (5.00, 5.00)
Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	75	5.04 (4.96, 5.12)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Female	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)
Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)
Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)
Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)
Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)
Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	431	50.27 (38.82, 65.10)
Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	431	534.54 (435.45, 656.16)
Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	431	338.75 (287.81, 398.69)
Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	431	277.04 (245.98, 312.01)
Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	431	61.50 (55.42, 68.25)
Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	135	54.79 (36.48, 82.31)
Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	135	754.21 (488.52, 1164.38)
Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	135	354.00 (256.55, 488.47)
Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	135	392.10 (328.64, 467.82)
Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	135	92.21 (79.37, 107.12)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	75	0.05 (0.05, 0.05)
Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	75	0.80 (0.80, 0.80)
Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	75	0.15 (0.15, 0.15)
Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	75	5.00 (5.00, 5.00)
Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	75	5.12 (4.98, 5.26)
Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	122	39.49 (25.50, 61.15)
Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	122	444.10 (297.05, 663.97)
Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	122	198.00 (144.09, 272.08)
Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	122	192.44 (159.14, 232.72)
Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	122	41.06 (35.01, 48.17)
Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	431	492.86 (365.71, 664.20)
Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	431	17107.99 (13216.22, 22145.76)
Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	431	10143.19 (8328.92, 12352.65)
Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	431	6046.91 (5463.04, 6693.19)
Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	431	1381.96 (1254.89, 1521.90)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	135	838.91 (516.31, 1363.08)
Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	135	29972.37 (21490.80, 41801.29)
Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	135	23039.26 (16238.88, 32687.46)
Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	135	13647.49 (11455.34, 16259.15)
Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	135	2904.16 (2416.88, 3489.69)
Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	75	0.05 (0.05, 0.05)
Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	75	0.80 (0.80, 0.80)
Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	75	0.15 (0.15, 0.15)
Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	75	5.00 (5.00, 5.00)
Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	75	5.03 (4.97, 5.10)
Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	122	454.77 (285.53, 724.33)
Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	122	12783.05 (7966.70, 20511.19)
Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	122	9025.72 (6465.76, 12599.25)
Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	122	4520.15 (3568.73, 5725.23)
Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	122	1094.53 (915.38, 1308.76)

Table 7f. 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)	215	0.05 (0.05, 0.05)
Age < 65 Female	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	215	0.80 (0.80, 0.80)
Age < 65 Female	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	215	0.15 (0.15, 0.15)
Age < 65 Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	215	5.00 (5.00, 5.00)
Age < 65 Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	215	5.00 (5.00, 5.00)
Age < 65 Female	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	72	0.05 (0.05, 0.05)
Age < 65 Female	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	0.80 (0.80, 0.80)
Age < 65 Female	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	0.15 (0.15, 0.15)
Age < 65 Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	72	5.00 (5.00, 5.00)
Age < 65 Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	72	5.00 (5.00, 5.00)
Age < 65 Female	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	33	0.05 (0.05, 0.05)
Age < 65 Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0.80 (0.80, 0.80)
Age < 65 Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0.15 (0.15, 0.15)
Age < 65 Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	33	5.00 (5.00, 5.00)
Age < 65 Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	33	5.06 (4.95, 5.17)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Female	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	68	0.05 (0.05, 0.05)
Age < 65 Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	68	0.80 (0.80, 0.80)
Age < 65 Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	68	0.15 (0.15, 0.15)
Age < 65 Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	68	5.00 (5.00, 5.00)
Age < 65 Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	68	5.00 (5.00, 5.00)
Age < 65 Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	215	39.99 (29.17, 54.83)
Age < 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	215	419.10 (326.91, 537.30)
Age < 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	215	268.08 (220.35, 326.14)
Age < 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	215	252.13 (217.99, 291.62)
Age < 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	215	56.62 (49.88, 64.28)
Age < 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	72	44.64 (27.40, 72.71)
Age < 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	594.81 (353.00, 1002.26)
Age < 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	265.31 (181.19, 388.49)
Age < 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	72	356.30 (288.35, 440.27)
Age < 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	72	87.03 (72.77, 104.08)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	33	0.05 (0.05, 0.05)
Age < 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0.80 (0.80, 0.80)
Age < 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0.15 (0.15, 0.15)
Age < 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	33	5.00 (5.00, 5.00)
Age < 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	33	5.00 (5.00, 5.00)
Age < 65 Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	68	36.51 (21.61, 61.68)
Age < 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	68	380.85 (235.36, 616.27)
Age < 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	68	164.16 (112.61, 239.30)
Age < 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	68	186.51 (148.64, 234.02)
Age < 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	68	39.56 (32.73, 47.81)
Age < 65 Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	215	362.95 (252.51, 521.70)
Age < 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	215	12245.40 (8956.06, 16742.82)
Age < 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	215	7284.09 (5747.31, 9231.79)
Age < 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	215	5367.65 (4747.25, 6069.14)
Age < 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	215	1314.23 (1168.61, 1478.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	72	578.63 (325.53, 1028.50)
Age < 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	21927.97 (14843.97, 32392.69)
Age < 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	17468.55 (11529.78, 26466.28)
Age < 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	72	12451.85 (10105.81, 15342.52)
Age < 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	72	2703.66 (2169.49, 3369.35)
Age < 65 Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	33	0.05 (0.05, 0.05)
Age < 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0.80 (0.80, 0.80)
Age < 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0.15 (0.15, 0.15)
Age < 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	33	5.00 (5.00, 5.00)
Age < 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	33	5.00 (5.00, 5.00)
Age < 65 Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	68	366.67 (211.05, 637.03)
Age < 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	68	9897.29 (5633.97, 17386.74)
Age < 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	68	7519.92 (5061.86, 11171.64)
Age < 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	68	4305.00 (3241.63, 5717.19)
Age < 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	68	1045.82 (846.62, 1291.89)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Male	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	145	0.05 (0.05, 0.05)
Age < 65 Male	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	145	0.80 (0.80, 0.80)
Age < 65 Male	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	145	0.15 (0.15, 0.15)
Age < 65 Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	145	5.00 (5.00, 5.00)
Age < 65 Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	145	5.00 (5.00, 5.00)
Age < 65 Male	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	48	0.05 (0.05, 0.05)
Age < 65 Male	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	0.80 (0.80, 0.80)
Age < 65 Male	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	0.15 (0.15, 0.15)
Age < 65 Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	48	5.00 (5.00, 5.00)
Age < 65 Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	48	5.00 (5.00, 5.00)
Age < 65 Male	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	28	0.05 (0.05, 0.05)
Age < 65 Male	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	28	0.80 (0.80, 0.80)
Age < 65 Male	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0.15 (0.15, 0.15)
Age < 65 Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	28	5.00 (5.00, 5.00)
Age < 65 Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	28	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Male	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	56	0.05 (0.05, 0.05)
Age < 65 Male	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	56	0.80 (0.80, 0.80)
Age < 65 Male	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	56	0.15 (0.15, 0.15)
Age < 65 Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	56	5.00 (5.00, 5.00)
Age < 65 Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	56	5.00 (5.00, 5.00)
Age < 65 Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	145	26.37 (19.17, 36.27)
Age < 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	145	292.79 (224.33, 382.15)
Age < 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	145	193.74 (153.96, 243.79)
Age < 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	145	204.53 (177.27, 235.99)
Age < 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	145	50.50 (43.62, 58.46)
Age < 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	48	64.79 (37.38, 112.29)
Age < 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	729.25 (428.27, 1241.76)
Age < 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	423.02 (274.63, 651.58)
Age < 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	48	401.63 (308.89, 522.22)
Age < 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	48	91.55 (71.22, 117.69)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	28	0.05 (0.05, 0.05)
Age < 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	28	0.80 (0.80, 0.80)
Age < 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0.15 (0.15, 0.15)
Age < 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	28	5.00 (5.00, 5.00)
Age < 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	28	5.00 (5.00, 5.00)
Age < 65 Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	56	17.99 (11.69, 27.68)
Age < 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	56	241.95 (163.74, 357.53)
Age < 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	56	106.81 (76.81, 148.54)
Age < 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	56	143.11 (118.10, 173.42)
Age < 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	56	37.73 (30.14, 47.22)
Age < 65 Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	145	271.37 (183.68, 400.92)
Age < 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	145	9208.58 (7224.81, 11737.05)
Age < 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	145	5158.07 (3892.19, 6835.65)
Age < 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	145	4965.20 (4279.36, 5760.94)
Age < 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	145	1175.54 (1021.88, 1352.30)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	48	1061.83 (438.31, 2572.37)
Age < 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	34494.73 (19897.90, 59799.59)
Age < 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	22723.11 (14234.89, 36272.81)
Age < 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	48	14793.40 (11209.43, 19523.26)
Age < 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	48	3000.82 (2371.61, 3796.97)
Age < 65 Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	28	0.05 (0.05, 0.05)
Age < 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	28	0.80 (0.80, 0.80)
Age < 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0.15 (0.15, 0.15)
Age < 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	28	5.00 (5.00, 5.00)
Age < 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	28	5.00 (5.00, 5.00)
Age < 65 Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	56	191.61 (99.12, 370.41)
Age < 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	56	6073.55 (3925.70, 9396.56)
Age < 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	56	3635.98 (2483.17, 5323.98)
Age < 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	56	3972.04 (3088.80, 5107.83)
Age < 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	56	964.02 (795.92, 1167.63)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Male	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	180	0.05 (0.05, 0.05)
Age \geq 65 Male	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)
Age \geq 65 Male	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)
Age \geq 65 Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)
Age \geq 65 Male	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)
Age \geq 65 Male	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	48	0.05 (0.05, 0.05)
Age \geq 65 Male	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	0.80 (0.80, 0.80)
Age \geq 65 Male	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	0.15 (0.15, 0.15)
Age \geq 65 Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	48	5.00 (5.00, 5.00)
Age \geq 65 Male	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	48	5.00 (5.00, 5.00)
Age \geq 65 Male	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	21	0.05 (0.05, 0.05)
Age \geq 65 Male	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	21	0.80 (0.80, 0.80)
Age \geq 65 Male	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	21	0.15 (0.15, 0.15)
Age \geq 65 Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	21	5.00 (5.00, 5.00)
Age \geq 65 Male	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	21	5.19 (4.83, 5.58)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Male	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	50	0.05 (0.05, 0.05)
Age \geq 65 Male	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	50	0.80 (0.80, 0.80)
Age \geq 65 Male	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	50	0.15 (0.15, 0.15)
Age \geq 65 Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	50	5.00 (5.00, 5.00)
Age \geq 65 Male	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	50	5.00 (5.00, 5.00)
Age \geq 65 Male	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	98.88 (75.27, 129.90)
Age \geq 65 Male	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1241.85 (1007.30, 1531.01)
Age \geq 65 Male	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	795.08 (670.10, 943.38)
Age \geq 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	180	371.62 (326.41, 423.09)
Age \geq 65 Male	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	180	77.18 (68.92, 86.44)
Age \geq 65 Male	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	48	184.25 (117.91, 287.92)
Age \geq 65 Male	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	1915.88 (1267.56, 2895.79)
Age \geq 65 Male	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	1302.11 (913.47, 1856.10)
Age \geq 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	48	680.95 (546.64, 848.26)
Age \geq 65 Male	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	48	145.22 (117.79, 179.04)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age ≥ 65 Male	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	21	0.05 (0.05, 0.05)
Age ≥ 65 Male	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	21	0.80 (0.80, 0.80)
Age ≥ 65 Male	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	21	0.15 (0.15, 0.15)
Age ≥ 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	21	5.41 (4.87, 6.01)
Age ≥ 65 Male	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	21	5.00 (5.00, 5.00)
Age ≥ 65 Male	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	50	78.47 (49.60, 124.15)
Age ≥ 65 Male	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	50	853.28 (542.22, 1342.80)
Age ≥ 65 Male	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	50	534.86 (378.77, 755.27)
Age ≥ 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	50	280.10 (228.49, 343.37)
Age ≥ 65 Male	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	50	48.96 (39.85, 60.16)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	1183.98 (862.56, 1625.19)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	49137.16 (38411.18, 62858.28)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	30669.19 (24487.54, 38411.33)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	180	7920.23 (7016.63, 8940.20)
Age ≥ 65 Male	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	180	1703.09 (1525.12, 1901.81)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Male	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	48	4250.12 (2504.26, 7213.11)
Age \geq 65 Male	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	111389.34 (67860.86, 182838.61)
Age \geq 65 Male	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	91968.70 (62592.53, 135131.80)
Age \geq 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	48	27125.98 (21887.11, 33618.82)
Age \geq 65 Male	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	48	3836.43 (3081.74, 4775.95)
Age \geq 65 Male	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	21	0.05 (0.05, 0.05)
Age \geq 65 Male	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	21	0.80 (0.80, 0.80)
Age \geq 65 Male	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	21	0.15 (0.15, 0.15)
Age \geq 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	21	5.50 (4.79, 6.31)
Age \geq 65 Male	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	21	5.21 (4.82, 5.63)
Age \geq 65 Male	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	50	619.83 (348.04, 1103.85)
Age \geq 65 Male	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	50	32930.04 (20702.56, 52379.41)
Age \geq 65 Male	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	50	24554.13 (17127.70, 35200.61)
Age \geq 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	50	6566.19 (5137.16, 8392.74)
Age \geq 65 Male	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	50	1275.03 (1067.55, 1522.85)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Female	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	216	0.05 (0.05, 0.05)
Age \geq 65 Female	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	0.80 (0.80, 0.80)
Age \geq 65 Female	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	0.15 (0.15, 0.15)
Age \geq 65 Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	216	5.00 (5.00, 5.00)
Age \geq 65 Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	216	5.00 (5.00, 5.00)
Age \geq 65 Female	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)
Age \geq 65 Female	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)
Age \geq 65 Female	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)
Age \geq 65 Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)
Age \geq 65 Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	63	5.00 (5.00, 5.00)
Age \geq 65 Female	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	42	0.05 (0.05, 0.05)
Age \geq 65 Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	42	0.80 (0.80, 0.80)
Age \geq 65 Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	42	0.15 (0.15, 0.15)
Age \geq 65 Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	42	5.00 (5.00, 5.00)
Age \geq 65 Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	42	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Female	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	54	0.05 (0.05, 0.05)
Age \geq 65 Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	54	0.80 (0.80, 0.80)
Age \geq 65 Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	54	0.15 (0.15, 0.15)
Age \geq 65 Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	54	5.00 (5.00, 5.00)
Age \geq 65 Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	54	5.00 (5.00, 5.00)
Age \geq 65 Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	216	125.51 (98.97, 159.17)
Age \geq 65 Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1414.54 (1149.84, 1740.17)
Age \geq 65 Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	863.64 (724.66, 1029.27)
Age \geq 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	216	403.84 (362.30, 450.14)
Age \geq 65 Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	216	85.60 (76.95, 95.22)
Age \geq 65 Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	63	138.85 (97.51, 197.70)
Age \geq 65 Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	2214.10 (1571.25, 3119.97)
Age \geq 65 Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	1309.61 (984.71, 1741.71)
Age \geq 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	63	605.37 (517.92, 707.59)
Age \geq 65 Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	63	119.87 (102.23, 140.55)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age ≥ 65 Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	42	0.05 (0.05, 0.05)
Age ≥ 65 Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	42	0.80 (0.80, 0.80)
Age ≥ 65 Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	42	0.15 (0.15, 0.15)
Age ≥ 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	42	5.00 (5.00, 5.00)
Age ≥ 65 Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	42	5.42 (4.93, 5.97)
Age ≥ 65 Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	54	56.76 (37.22, 86.56)
Age ≥ 65 Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	54	903.43 (603.59, 1352.23)
Age ≥ 65 Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	54	470.86 (329.07, 673.75)
Age ≥ 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	54	222.43 (180.26, 274.45)
Age ≥ 65 Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	54	48.81 (40.20, 59.26)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	216	1675.75 (1246.24, 2253.31)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	65180.88 (51272.37, 82862.32)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	38140.62 (31384.20, 46351.58)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	216	9739.47 (8755.84, 10833.62)
Age ≥ 65 Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	216	1689.61 (1518.65, 1879.83)

(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)	63	4523.19 (2860.34, 7152.74)
Age \geq 65 Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	123694.43 (85657.93, 178621.08)
Age \geq 65 Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	80861.33 (57753.44, 113214.98)
Age \geq 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	63	20685.66 (17314.24, 24713.57)
Age \geq 65 Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	63	4017.45 (3365.13, 4796.22)
Age \geq 65 Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	42	0.05 (0.05, 0.05)
Age \geq 65 Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	42	0.80 (0.80, 0.80)
Age \geq 65 Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	42	0.15 (0.15, 0.15)
Age \geq 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	42	5.00 (5.00, 5.00)
Age \geq 65 Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	42	5.13 (4.88, 5.38)
Age \geq 65 Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	54	1230.33 (697.35, 2170.67)
Age \geq 65 Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	54	41703.90 (26588.92, 65411.26)
Age \geq 65 Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	54	20981.08 (14398.27, 30573.51)
Age \geq 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	54	5662.89 (4541.79, 7060.71)
Age \geq 65 Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	54	1350.84 (1056.21, 1727.66)

Table 7g. 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)	115	0.05 (0.05, 0.05)
Hispanic or Latino	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	115	0.80 (0.80, 0.80)
Hispanic or Latino	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	115	0.15 (0.15, 0.15)
Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	115	5.00 (5.00, 5.00)
Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	115	5.00 (5.00, 5.00)
Hispanic or Latino	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)
Hispanic or Latino	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)
Hispanic or Latino	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)
Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)
Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	29	5.00 (5.00, 5.00)
Hispanic or Latino	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	16	0.05 (0.05, 0.05)
Hispanic or Latino	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0.80 (0.80, 0.80)
Hispanic or Latino	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0.15 (0.15, 0.15)
Hispanic or Latino	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	16	5.00 (5.00, 5.00)
Hispanic or Latino	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	16	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Hispanic or Latino	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	27	0.05 (0.05, 0.05)
Hispanic or Latino	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	27	0.80 (0.80, 0.80)
Hispanic or Latino	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	27	0.15 (0.15, 0.15)
Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	27	5.00 (5.00, 5.00)
Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	27	5.00 (5.00, 5.00)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	115	42.13 (23.60, 75.21)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	115	491.43 (292.25, 826.38)
Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	115	341.22 (227.33, 512.17)
Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	115	250.45 (192.03, 326.66)
Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	115	65.10 (50.29, 84.27)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	29	73.32 (35.19, 152.74)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	958.71 (389.66, 2358.79)
Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	506.17 (276.73, 925.85)
Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	29	488.33 (328.76, 725.36)
Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	29	130.30 (92.68, 183.19)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	16	0.05 (0.05, 0.05)
Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0.80 (0.80, 0.80)
Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0.15 (0.15, 0.15)
Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	16	5.00 (5.00, 5.00)
Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	16	5.00 (5.00, 5.00)
Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	27	33.50 (17.23, 65.13)
Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	27	377.54 (202.81, 702.81)
Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	27	127.47 (72.54, 224.00)
Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	27	167.68 (122.53, 229.48)
Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	27	35.14 (24.29, 50.82)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	115	646.14 (331.54, 1259.27)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	115	16880.81 (9915.67, 28738.51)
Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	115	10290.17 (6529.63, 16216.48)
Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	115	5633.49 (4263.48, 7443.73)
Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	115	1299.55 (1081.50, 1561.57)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	29	2361.11 (860.83, 6476.16)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	66810.96 (26355.86, 169362.87)
Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	19623.56 (9531.75, 40400.17)
Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	29	18131.58 (12027.32, 27333.97)
Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	29	2871.89 (2057.28, 4009.06)
Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	16	0.05 (0.05, 0.05)
Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0.80 (0.80, 0.80)
Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0.15 (0.15, 0.15)
Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	16	5.00 (5.00, 5.00)
Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	16	5.00 (5.00, 5.00)
Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	27	421.38 (146.98, 1208.07)
Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	27	5832.92 (3719.30, 9147.68)
Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	27	8718.57 (4671.50, 16271.78)
Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	27	3785.33 (2431.92, 5891.93)
Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	27	812.86 (499.53, 1322.75)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	617	0.05 (0.05, 0.05)
Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	617	0.80 (0.80, 0.80)
Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	617	0.15 (0.15, 0.15)
Not Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	617	5.00 (5.00, 5.00)
Not Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	617	5.00 (5.00, 5.00)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	192	0.05 (0.05, 0.05)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	192	0.80 (0.80, 0.80)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	192	0.15 (0.15, 0.15)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	192	5.00 (5.00, 5.00)
Not Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	192	5.00 (5.00, 5.00)
Not Hispanic or Latino	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	105	0.05 (0.05, 0.05)
Not Hispanic or Latino	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	105	0.80 (0.80, 0.80)
Not Hispanic or Latino	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	105	0.15 (0.15, 0.15)
Not Hispanic or Latino	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	105	5.00 (5.00, 5.00)
Not Hispanic or Latino	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	105	5.04 (4.98, 5.11)

(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)	197	0.05 (0.05, 0.05)
Not Hispanic or Latino	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	197	0.80 (0.80, 0.80)
Not Hispanic or Latino	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	197	0.15 (0.15, 0.15)
Not Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	197	5.00 (5.00, 5.00)
Not Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	197	5.00 (5.00, 5.00)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	617	43.49 (35.64, 53.06)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	617	471.23 (402.48, 551.72)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	617	301.50 (264.57, 343.59)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	617	259.55 (236.90, 284.37)
Not Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	617	58.61 (53.95, 63.67)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	192	60.79 (43.56, 84.84)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	192	789.28 (557.62, 1117.18)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	192	395.43 (303.86, 514.59)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	192	401.25 (346.18, 465.08)
Not Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	192	90.71 (79.89, 102.99)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	105	0.05 (0.05, 0.05)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	105	0.80 (0.80, 0.80)
Not Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	105	0.15 (0.15, 0.15)
Not Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	105	5.04 (4.99, 5.09)
Not Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	105	5.08 (4.99, 5.17)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	197	31.50 (22.59, 43.93)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	197	380.24 (282.81, 511.23)
Not Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	197	179.86 (141.59, 228.48)
Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	197	180.48 (156.33, 208.35)
Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	197	41.07 (36.16, 46.65)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	617	424.40 (335.96, 536.12)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	617	15177.42 (12612.30, 18264.25)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	617	8957.40 (7622.67, 10525.84)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	617	5850.58 (5397.25, 6341.99)
Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	617	1347.26 (1242.57, 1460.78)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	192	895.24 (582.59, 1375.68)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	192	31294.34 (23695.05, 41330.83)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	192	26107.79 (19593.72, 34787.50)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	192	14264.14 (12313.15, 16524.25)
Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	192	2936.50 (2534.07, 3402.83)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	105	0.05 (0.05, 0.05)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	105	0.80 (0.80, 0.80)
Not Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	105	0.15 (0.15, 0.15)
Not Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	105	5.05 (4.98, 5.12)
Not Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	105	5.04 (4.98, 5.10)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	197	336.79 (228.62, 496.13)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	197	11481.92 (8121.74, 16232.31)
Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	197	6982.30 (5351.20, 9110.58)
Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	197	4559.26 (3833.09, 5423.00)
Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	197	1096.59 (968.61, 1241.49)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	24	0.05 (0.05, 0.05)
Not reported and unknown	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	24	0.80 (0.80, 0.80)
Not reported and unknown	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	24	0.15 (0.15, 0.15)
Not reported and unknown	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	24	5.00 (5.00, 5.00)
Not reported and unknown	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	24	5.00 (5.00, 5.00)
Not reported and unknown	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	10	0.05 (0.05, 0.05)
Not reported and unknown	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10	0.80 (0.80, 0.80)
Not reported and unknown	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10	0.15 (0.15, 0.15)
Not reported and unknown	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	10	5.00 (5.00, 5.00)
Not reported and unknown	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	10	5.00 (5.00, 5.00)
Not reported and unknown	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	3	0.05 (0.05, 0.05)
Not reported and unknown	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	3	0.80 (0.80, 0.80)
Not reported and unknown	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	3	0.15 (0.15, 0.15)
Not reported and unknown	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	3	5.00 (5.00, 5.00)
Not reported and unknown	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	3	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)
Not reported and unknown	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)
Not reported and unknown	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)
Not reported and unknown	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)
Not reported and unknown	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)
Not reported and unknown	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	24	58.01 (26.79, 125.63)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	24	687.35 (401.67, 1176.23)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	24	368.94 (246.00, 553.31)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	24	265.43 (178.88, 393.84)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	24	47.26 (35.08, 63.67)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	10	161.25 (57.39, 453.07)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	10	1011.94 (491.79, 2082.23)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	10	998.83 (440.25, 2266.09)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	10	603.35 (391.60, 929.61)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	10	164.94 (96.90, 280.75)

(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)	3	0.05 (0.05, 0.05)
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	3	0.80 (0.80, 0.80)
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	3	0.15 (0.15, 0.15)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	3	5.00 (5.00, 5.00)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	3	5.00 (5.00, 5.00)
Not reported and unknown	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	4	150.91 (50.10, 454.56)
Not reported and unknown	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	4	933.13 (177.65, 4901.28)
Not reported and unknown	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	4	919.26 (321.02, 2632.38)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	4	334.88 (189.66, 591.32)
Not reported and unknown	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	4	67.15 (53.10, 84.92)
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	24	327.27 (119.82, 893.91)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	24	22839.43 (14802.74, 35239.40)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	24	8195.01 (4910.50, 13676.45)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	24	5913.17 (4520.71, 7734.55)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	24	1240.74 (937.84, 1641.46)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	10	4301.54 (1357.36, 13631.78)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	10	103890.10 (45002.03, 239837.02)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	10	47404.36 (23207.03, 96831.58)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	10	23215.17 (13671.51, 39420.96)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	10	6233.53 (4031.44, 9638.47)
Not reported and unknown	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	3	0.05 (0.05, 0.05)
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	3	0.80 (0.80, 0.80)
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	3	0.15 (0.15, 0.15)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	3	5.00 (5.00, 5.00)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	3	5.00 (5.00, 5.00)
Not reported and unknown	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	4	709.75 (60.37, 8344.97)
Not reported and unknown	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	4	39619.41 (16493.33, 95171.68)
Not reported and unknown	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	4	36731.43 (9467.26, 142511.95)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	4	5283.65 (2596.92, 10750.03)
Not reported and unknown	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	4	1032.69 (648.15, 1645.37)

Table 7h. 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)	364	0.05 (0.05, 0.05)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	0.80 (0.80, 0.80)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	0.15 (0.15, 0.15)
White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	364	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	364	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	123	0.05 (0.05, 0.05)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	0.80 (0.80, 0.80)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	0.15 (0.15, 0.15)
White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	123	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	123	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	64	0.05 (0.05, 0.05)
White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0.80 (0.80, 0.80)
White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0.15 (0.15, 0.15)
White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	64	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	64	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)
White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)
White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)
White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	364	41.06 (31.51, 53.49)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	444.62 (363.50, 543.85)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	290.68 (246.41, 342.91)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	364	255.72 (227.37, 287.61)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	364	57.60 (52.24, 63.50)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	123	53.76 (35.74, 80.87)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	703.12 (455.68, 1084.94)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	363.42 (262.18, 503.74)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	123	388.43 (322.77, 467.45)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	123	86.06 (72.97, 101.49)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	64	0.05 (0.05, 0.05)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0.80 (0.80, 0.80)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0.15 (0.15, 0.15)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	64	5.06 (4.98, 5.14)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	64	5.09 (4.96, 5.22)
White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	122	25.64 (18.01, 36.52)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	122	367.32 (265.15, 508.86)
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	122	176.46 (130.58, 238.44)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	122	166.17 (141.73, 194.83)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	122	39.95 (34.43, 46.36)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	364	429.31 (325.12, 566.88)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	15339.37 (12072.43, 19490.37)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	8451.21 (6898.39, 10353.56)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	364	5748.65 (5201.26, 6353.65)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	364	1336.93 (1209.59, 1477.67)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	123	776.96 (446.42, 1352.24)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	29727.42 (21038.85, 42004.17)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	24717.56 (17094.43, 35740.18)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	123	12924.84 (10755.64, 15531.53)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	123	2779.22 (2303.45, 3353.26)
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	64	0.05 (0.05, 0.05)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0.80 (0.80, 0.80)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0.15 (0.15, 0.15)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	64	5.05 (4.95, 5.14)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	64	5.03 (4.97, 5.10)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	122	317.61 (216.44, 466.09)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	122	10278.20 (6874.74, 15366.60)
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	122	7342.45 (5384.54, 10012.29)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	122	4559.48 (3711.18, 5601.69)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	122	1141.78 (996.05, 1308.83)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Black or African American	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	177	0.05 (0.05, 0.05)
Black or African American	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	177	0.80 (0.80, 0.80)
Black or African American	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	177	0.15 (0.15, 0.15)
Black or African American	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	177	5.00 (5.00, 5.00)
Black or African American	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	177	5.00 (5.00, 5.00)
Black or African American	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	47	0.05 (0.05, 0.05)
Black or African American	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	47	0.80 (0.80, 0.80)
Black or African American	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	47	0.15 (0.15, 0.15)
Black or African American	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	47	5.00 (5.00, 5.00)
Black or African American	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	47	5.00 (5.00, 5.00)
Black or African American	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)
Black or African American	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)
Black or African American	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)
Black or African American	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)
Black or African American	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	30	5.23 (4.90, 5.59)

(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)	43	0.05 (0.05, 0.05)
Black or African American	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	43	0.80 (0.80, 0.80)
Black or African American	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	43	0.15 (0.15, 0.15)
Black or African American	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	43	5.00 (5.00, 5.00)
Black or African American	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	43	5.00 (5.00, 5.00)
Black or African American	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	177	49.86 (35.23, 70.57)
Black or African American	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	177	576.32 (414.65, 801.02)
Black or African American	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	177	358.25 (279.91, 458.51)
Black or African American	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	177	271.52 (228.80, 322.22)
Black or African American	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	177	59.84 (50.41, 71.03)
Black or African American	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	47	53.32 (27.21, 104.50)
Black or African American	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	47	624.63 (357.81, 1090.43)
Black or African American	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	47	313.05 (198.01, 494.94)
Black or African American	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	47	364.34 (269.52, 492.53)
Black or African American	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	47	98.58 (79.50, 122.23)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Black or African American	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)
Black or African American	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)
Black or African American	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)
Black or African American	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)
Black or African American	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	30	5.00 (5.00, 5.00)
Black or African American	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	43	34.73 (14.02, 86.02)
Black or African American	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	43	226.82 (99.31, 518.04)
Black or African American	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	43	199.48 (116.80, 340.67)
Black or African American	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	43	176.31 (117.12, 265.43)
Black or African American	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	43	43.50 (32.59, 58.08)
Black or African American	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	177	456.49 (283.36, 735.41)
Black or African American	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	177	16464.79 (11343.20, 23898.84)
Black or African American	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	177	9659.07 (6920.83, 13480.70)
Black or African American	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	177	5795.41 (4882.53, 6878.96)
Black or African American	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	177	1264.62 (1095.27, 1460.15)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Black or African American	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	47	923.52 (437.06, 1951.41)
Black or African American	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	47	28773.41 (14938.07, 55422.75)
Black or African American	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	47	21563.62 (12668.88, 36703.28)
Black or African American	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	47	17910.84 (13137.44, 24418.63)
Black or African American	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	47	3160.64 (2457.43, 4065.08)
Black or African American	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)
Black or African American	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)
Black or African American	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)
Black or African American	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	30	5.07 (4.93, 5.22)
Black or African American	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	30	5.10 (4.90, 5.31)
Black or African American	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	43	265.27 (102.59, 685.91)
Black or African American	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	43	11939.56 (4534.72, 31435.89)
Black or African American	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	43	7387.02 (3806.79, 14334.40)
Black or African American	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	43	3988.84 (2831.11, 5620.00)
Black or African American	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	43	759.94 (565.62, 1021.01)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Asian	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	72	0.05 (0.05, 0.05)
Asian	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	0.80 (0.80, 0.80)
Asian	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	0.15 (0.15, 0.15)
Asian	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	72	5.00 (5.00, 5.00)
Asian	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	72	5.00 (5.00, 5.00)
Asian	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	15	0.05 (0.05, 0.05)
Asian	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	15	0.80 (0.80, 0.80)
Asian	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	15	0.15 (0.15, 0.15)
Asian	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	15	5.00 (5.00, 5.00)
Asian	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	15	5.00 (5.00, 5.00)
Asian	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	11	0.05 (0.05, 0.05)
Asian	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	11	0.80 (0.80, 0.80)
Asian	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	11	0.15 (0.15, 0.15)
Asian	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	11	5.00 (5.00, 5.00)
Asian	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	11	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Asian	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	22	0.05 (0.05, 0.05)
Asian	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	22	0.80 (0.80, 0.80)
Asian	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	22	0.15 (0.15, 0.15)
Asian	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	22	5.00 (5.00, 5.00)
Asian	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	22	5.00 (5.00, 5.00)
Asian	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	72	37.82 (21.68, 66.00)
Asian	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	475.22 (319.69, 706.40)
Asian	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	262.54 (163.56, 421.43)
Asian	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	72	232.55 (174.73, 309.51)
Asian	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	72	52.65 (38.88, 71.30)
Asian	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	15	294.07 (155.55, 555.91)
Asian	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	15	2620.67 (906.74, 7574.34)
Asian	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	15	1190.35 (747.09, 1896.61)
Asian	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	15	655.99 (503.43, 854.77)
Asian	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	15	127.56 (102.04, 159.45)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Asian	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	11	0.05 (0.05, 0.05)
Asian	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	11	0.80 (0.80, 0.80)
Asian	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	11	0.15 (0.15, 0.15)
Asian	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	11	5.00 (5.00, 5.00)
Asian	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	11	5.17 (4.83, 5.54)
Asian	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	22	44.02 (14.95, 129.57)
Asian	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	22	659.00 (267.31, 1624.62)
Asian	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	22	144.30 (62.05, 335.58)
Asian	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	22	204.47 (132.07, 316.57)
Asian	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	22	41.09 (26.66, 63.32)
Asian	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	72	315.02 (139.54, 711.20)
Asian	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	12012.43 (6907.26, 20890.86)
Asian	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	9468.91 (5592.69, 16031.67)
Asian	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	72	5818.15 (4505.18, 7513.77)
Asian	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	72	1397.40 (1082.23, 1804.36)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Asian	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	15	2569.60 (1353.75, 4877.47)
Asian	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	15	49794.64 (32920.63, 75317.70)
Asian	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	15	48882.24 (30100.12, 79384.18)
Asian	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	15	20828.51 (15997.92, 27117.72)
Asian	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	15	4595.85 (3092.64, 6829.73)
Asian	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	11	0.05 (0.05, 0.05)
Asian	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	11	0.80 (0.80, 0.80)
Asian	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	11	0.15 (0.15, 0.15)
Asian	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	11	5.00 (5.00, 5.00)
Asian	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	11	5.00 (5.00, 5.00)
Asian	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	22	389.72 (88.61, 1713.97)
Asian	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	22	10808.40 (3236.81, 36091.52)
Asian	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	22	4860.65 (1861.04, 12695.03)
Asian	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	22	5318.60 (3104.46, 9111.90)
Asian	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	22	1310.44 (837.82, 2049.68)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
American Indian or Alaska Native	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	23	0.05 (0.05, 0.05)
American Indian or Alaska Native	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	0.80 (0.80, 0.80)
American Indian or Alaska Native	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	0.15 (0.15, 0.15)
American Indian or Alaska Native	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	23	5.00 (5.00, 5.00)
American Indian or Alaska Native	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	23	5.00 (5.00, 5.00)
American Indian or Alaska Native	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	8	0.05 (0.05, 0.05)
American Indian or Alaska Native	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	8	0.80 (0.80, 0.80)
American Indian or Alaska Native	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	8	0.15 (0.15, 0.15)
American Indian or Alaska Native	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	8	5.00 (5.00, 5.00)
American Indian or Alaska Native	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	8	5.00 (5.00, 5.00)
American Indian or Alaska Native	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)
American Indian or Alaska Native	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)
American Indian or Alaska Native	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)
American Indian or Alaska Native	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)
American Indian or Alaska Native	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
American Indian or Alaska Native	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	10	0.05 (0.05, 0.05)
American Indian or Alaska Native	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	10	0.80 (0.80, 0.80)
American Indian or Alaska Native	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	10	0.15 (0.15, 0.15)
American Indian or Alaska Native	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	10	5.00 (5.00, 5.00)
American Indian or Alaska Native	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	10	5.00 (5.00, 5.00)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	23	93.57 (44.17, 198.23)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	762.61 (273.77, 2124.33)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	462.07 (240.29, 888.54)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	23	363.91 (239.83, 552.19)
American Indian or Alaska Native	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	23	89.99 (54.50, 148.58)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	8	140.81 (65.82, 301.25)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	8	2938.82 (1232.89, 7005.20)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	8	2391.07 (852.07, 6709.78)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	8	615.20 (422.79, 895.18)
American Indian or Alaska Native	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	8	108.79 (73.51, 161.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)
American Indian or Alaska Native	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)
American Indian or Alaska Native	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)
American Indian or Alaska Native	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	10	102.22 (64.50, 162.00)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	10	758.10 (453.73, 1266.65)
American Indian or Alaska Native	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	10	443.10 (304.99, 643.75)
American Indian or Alaska Native	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	10	328.46 (256.87, 420.01)
American Indian or Alaska Native	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	10	62.76 (44.40, 88.70)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	23	1173.21 (261.14, 5270.72)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	24391.43 (10080.85, 59017.01)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	14954.48 (6972.53, 32073.94)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	23	6254.79 (4231.93, 9244.59)
American Indian or Alaska Native	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	23	1953.83 (1315.57, 2901.76)

(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)	8	10072.81 (4432.96, 22887.98)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	8	219326.14 (121140.13, 397093.47)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	8	38169.31 (14749.81, 98773.91)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	8	22806.33 (13916.72, 37374.35)
American Indian or Alaska Native	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	8	5321.00 (2135.17, 13260.30)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)
American Indian or Alaska Native	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)
American Indian or Alaska Native	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)
American Indian or Alaska Native	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	10	663.76 (286.34, 1538.66)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	10	13191.00 (3827.99, 45455.25)
American Indian or Alaska Native	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	10	26029.14 (16504.54, 41050.31)
American Indian or Alaska Native	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	10	4660.02 (3155.48, 6881.93)
American Indian or Alaska Native	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	10	1347.30 (880.76, 2060.96)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	9	0.05 (0.05, 0.05)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	9	0.80 (0.80, 0.80)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	9	0.15 (0.15, 0.15)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	9	5.00 (5.00, 5.00)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	9	5.00 (5.00, 5.00)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)
Native Hawaiian or Other Pacific Islander	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	1	0.05 (0.05, 0.05)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0.80 (0.80, 0.80)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0.15 (0.15, 0.15)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	1	5.00 (5.00, 5.00)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	1	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)
Native Hawaiian or Other Pacific Islander	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	9	99.87 (61.12, 163.19)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	9	426.51 (255.81, 711.15)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	9	380.07 (276.92, 521.65)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	9	331.39 (276.43, 397.27)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	9	62.78 (49.85, 79.05)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	4	226.29 (88.46, 578.83)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	914.11 (581.80, 1436.23)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	1737.86 (569.11, 5306.85)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	4	701.01 (553.07, 888.52)
Native Hawaiian or Other Pacific Islander	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	4	275.54 (162.06, 468.49)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	1	0.05 (0.05, 0.05)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0.80 (0.80, 0.80)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0.15 (0.15, 0.15)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	1	5.00 (5.00, 5.00)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	1	5.00 (5.00, 5.00)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	5	27.26 (7.93, 93.72)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	5	252.40 (62.65, 1016.84)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	5	218.75 (78.82, 607.12)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	5	211.27 (153.18, 291.38)
Native Hawaiian or Other Pacific Islander	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	5	44.16 (24.09, 80.94)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	9	356.71 (64.07, 1986.10)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	9	13246.47 (6274.44, 27965.66)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	9	8165.52 (2859.04, 23321.02)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	9	9064.60 (6636.76, 12380.60)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	9	2156.85 (1616.92, 2877.08)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	4	6042.10 (2022.73, 18048.40)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	74054.95 (33738.41, 162548.74)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	101850.63 (47782.62, 217098.82)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	4	27972.03 (20753.71, 37700.94)
Native Hawaiian or Other Pacific Islander	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	4	6157.46 (3558.81, 10653.66)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	1	0.05 (0.05, 0.05)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0.80 (0.80, 0.80)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0.15 (0.15, 0.15)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	1	5.00 (5.00, 5.00)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	1	5.00 (5.00, 5.00)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	5	432.15 (37.94, 4922.31)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	5	38088.52 (9838.22, 147459.16)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	5	4427.51 (2207.15, 8881.52)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	5	4113.03 (2238.68, 7556.69)
Native Hawaiian or Other Pacific Islander	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	5	1174.47 (501.00, 2753.23)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Multiracial	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	49	0.05 (0.05, 0.05)
Multiracial	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	49	0.80 (0.80, 0.80)
Multiracial	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	49	0.15 (0.15, 0.15)
Multiracial	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	49	5.00 (5.00, 5.00)
Multiracial	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	49	5.00 (5.00, 5.00)
Multiracial	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	16	0.05 (0.05, 0.05)
Multiracial	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	16	0.80 (0.80, 0.80)
Multiracial	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	16	0.15 (0.15, 0.15)
Multiracial	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	16	5.00 (5.00, 5.00)
Multiracial	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	16	5.00 (5.00, 5.00)
Multiracial	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	6	0.05 (0.05, 0.05)
Multiracial	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	6	0.80 (0.80, 0.80)
Multiracial	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	6	0.15 (0.15, 0.15)
Multiracial	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	6	5.00 (5.00, 5.00)
Multiracial	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	6	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Multiracial	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	12	0.05 (0.05, 0.05)
Multiracial	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	12	0.80 (0.80, 0.80)
Multiracial	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	12	0.15 (0.15, 0.15)
Multiracial	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	12	5.00 (5.00, 5.00)
Multiracial	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	12	5.00 (5.00, 5.00)
Multiracial	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	49	29.45 (12.69, 68.38)
Multiracial	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	49	410.51 (186.54, 903.38)
Multiracial	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	49	278.28 (158.14, 489.70)
Multiracial	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	49	205.17 (141.25, 298.02)
Multiracial	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	49	57.57 (38.68, 85.69)
Multiracial	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	16	68.05 (31.63, 146.42)
Multiracial	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	16	971.93 (330.52, 2858.07)
Multiracial	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	16	532.91 (268.62, 1057.20)
Multiracial	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	16	473.52 (309.87, 723.59)
Multiracial	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	16	126.56 (85.26, 187.85)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Multiracial	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	6	0.05 (0.05, 0.05)
Multiracial	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	6	0.80 (0.80, 0.80)
Multiracial	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	6	0.15 (0.15, 0.15)
Multiracial	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	6	5.00 (5.00, 5.00)
Multiracial	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	6	5.00 (5.00, 5.00)
Multiracial	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	12	31.59 (18.74, 53.25)
Multiracial	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	12	314.25 (165.30, 597.40)
Multiracial	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	12	83.65 (37.43, 186.90)
Multiracial	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	12	178.36 (142.47, 223.30)
Multiracial	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	12	37.74 (22.93, 62.11)
Multiracial	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	49	395.17 (132.13, 1181.86)
Multiracial	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	49	16815.75 (7965.95, 35497.30)
Multiracial	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	49	8340.71 (4538.01, 15329.94)
Multiracial	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	49	6257.61 (4376.11, 8948.07)
Multiracial	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	49	1143.71 (824.93, 1585.69)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Multiracial	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	16	1464.47 (408.74, 5246.97)
Multiracial	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	16	50139.82 (17535.13, 143369.44)
Multiracial	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	16	25459.67 (10716.55, 60485.41)
Multiracial	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	16	14308.15 (9255.43, 22119.25)
Multiracial	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	16	2633.58 (1762.06, 3936.14)
Multiracial	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	6	0.05 (0.05, 0.05)
Multiracial	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	6	0.80 (0.80, 0.80)
Multiracial	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	6	0.15 (0.15, 0.15)
Multiracial	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	6	5.00 (5.00, 5.00)
Multiracial	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	6	5.00 (5.00, 5.00)
Multiracial	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	12	548.21 (57.84, 5195.84)
Multiracial	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	12	7909.85 (4369.39, 14319.10)
Multiracial	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	12	4598.09 (2193.33, 9639.44)
Multiracial	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	12	3160.71 (1633.71, 6114.95)
Multiracial	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	12	745.11 (497.59, 1115.75)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Other	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	26	0.05 (0.05, 0.05)
Other	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	0.80 (0.80, 0.80)
Other	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	0.15 (0.15, 0.15)
Other	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	26	5.00 (5.00, 5.00)
Other	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	26	5.00 (5.00, 5.00)
Other	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)
Other	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)
Other	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)
Other	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)
Other	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)
Other	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)
Other	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)
Other	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)
Other	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)
Other	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Other	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	7	0.05 (0.05, 0.05)
Other	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	7	0.80 (0.80, 0.80)
Other	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	7	0.15 (0.15, 0.15)
Other	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	7	5.00 (5.00, 5.00)
Other	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	7	5.00 (5.00, 5.00)
Other	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	26	43.50 (17.39, 108.82)
Other	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	399.49 (167.27, 954.06)
Other	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	318.92 (166.57, 610.62)
Other	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	26	271.65 (178.35, 413.75)
Other	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	26	57.67 (34.42, 96.63)
Other	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	5	167.97 (47.36, 595.71)
Other	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	1250.64 (645.49, 2423.11)
Other	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	576.70 (296.35, 1122.25)
Other	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	5	555.57 (345.65, 892.95)
Other	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	5	171.34 (101.55, 289.08)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Other	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)
Other	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)
Other	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)
Other	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)
Other	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)
Other	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	7	65.66 (6.82, 632.49)
Other	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	7	536.53 (117.15, 2457.11)
Other	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	7	143.17 (79.74, 257.05)
Other	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	7	206.55 (78.40, 544.17)
Other	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	7	30.45 (12.86, 72.10)
Other	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	26	766.05 (206.69, 2839.14)
Other	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	16598.89 (7152.47, 38521.43)
Other	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	9766.16 (4337.03, 21991.52)
Other	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	26	5155.98 (2770.78, 9594.45)
Other	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	26	1143.47 (843.72, 1549.72)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Other	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	5	5967.69 (1293.08, 27541.48)
Other	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	93702.20 (39786.69, 220679.37)
Other	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	52255.49 (28647.36, 95318.96)
Other	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	5	44169.24 (23062.37, 84593.29)
Other	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	5	3465.64 (2291.99, 5240.27)
Other	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)
Other	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)
Other	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)
Other	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)
Other	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)
Other	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	7	584.51 (42.27, 8082.47)
Other	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	7	6186.73 (2340.40, 16354.28)
Other	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	7	11067.44 (3446.37, 35541.21)
Other	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	7	4673.65 (1268.25, 17222.90)
Other	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	7	721.89 (301.72, 1727.19)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)
Not reported and unknown	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)
Not reported and unknown	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)
Not reported and unknown	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)
Not reported and unknown	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)
Not reported and unknown	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)
Not reported and unknown	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)
Not reported and unknown	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)
Not reported and unknown	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)
Not reported and unknown	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)
Not reported and unknown	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	1	0.05 (0.05, 0.05)
Not reported and unknown	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0.80 (0.80, 0.80)
Not reported and unknown	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0.15 (0.15, 0.15)
Not reported and unknown	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	1	5.00 (5.00, 5.00)
Not reported and unknown	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	1	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	5	65.58 (5.93, 724.97)
Not reported and unknown	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	5	498.76 (93.21, 2668.88)
Not reported and unknown	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	5	458.96 (91.81, 2294.37)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	5	243.46 (96.65, 613.24)
Not reported and unknown	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	5	79.18 (44.71, 140.24)
Not reported and unknown	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	4	90.05 (15.63, 519.03)
Not reported and unknown	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	2508.31 (744.73, 8448.19)
Not reported and unknown	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	684.69 (161.32, 2906.01)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	4	651.90 (287.13, 1480.08)
Not reported and unknown	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	4	117.60 (56.06, 246.68)
Not reported and unknown	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	1	0.05 (0.05, 0.05)
Not reported and unknown	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0.80 (0.80, 0.80)
Not reported and unknown	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0.15 (0.15, 0.15)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	1	5.00 (5.00, 5.00)
Not reported and unknown	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	1	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Not reported and unknown	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	5	800.56 (87.46, 7327.65)
Not reported and unknown	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	5	12804.63 (1405.77, 116632.70)
Not reported and unknown	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	5	18889.81 (2570.49, 138816.11)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	5	9832.63 (4912.05, 19682.33)
Not reported and unknown	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	5	1054.61 (469.14, 2370.72)
Not reported and unknown	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	4	5633.11 (824.49, 38486.54)
Not reported and unknown	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	101127.66 (20013.89, 510985.15)
Not reported and unknown	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	39070.40 (7675.07, 198890.31)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	4	12510.05 (7231.84, 21640.61)
Not reported and unknown	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	4	3345.35 (1385.85, 8075.44)
Not reported and unknown	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	1	0.05 (0.05, 0.05)
Not reported and unknown	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0.80 (0.80, 0.80)
Not reported and unknown	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0.15 (0.15, 0.15)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	1	5.00 (5.00, 5.00)
Not reported and unknown	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	1	5.00 (5.00, 5.00)

Table 7i. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Communities of color

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Communities of color						
Communities of Color	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	392	0.05 (0.05, 0.05)
Communities of Color	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	392	0.80 (0.80, 0.80)
Communities of Color	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	392	0.15 (0.15, 0.15)
Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	392	5.00 (5.00, 5.00)
Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	392	5.00 (5.00, 5.00)
Communities of Color	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	108	0.05 (0.05, 0.05)
Communities of Color	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	108	0.80 (0.80, 0.80)
Communities of Color	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	108	0.15 (0.15, 0.15)
Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	108	5.00 (5.00, 5.00)
Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	108	5.00 (5.00, 5.00)
Communities of Color	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	60	0.05 (0.05, 0.05)
Communities of Color	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	60	0.80 (0.80, 0.80)
Communities of Color	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	60	0.15 (0.15, 0.15)
Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	60	5.00 (5.00, 5.00)
Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	60	5.09 (4.96, 5.22)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Communities of Color	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	106	0.05 (0.05, 0.05)
Communities of Color	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	106	0.80 (0.80, 0.80)
Communities of Color	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	106	0.15 (0.15, 0.15)
Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	106	5.00 (5.00, 5.00)
Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	106	5.00 (5.00, 5.00)
Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	392	47.26 (36.70, 60.86)
Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	392	525.41 (419.74, 657.70)
Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	392	330.77 (274.54, 398.51)
Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	392	262.44 (232.16, 296.66)
Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	392	60.92 (53.65, 69.18)
Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	108	83.38 (55.09, 126.19)
Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	108	1009.14 (666.67, 1527.55)
Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	108	516.48 (374.80, 711.70)
Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	108	457.67 (379.69, 551.66)
Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	108	112.88 (96.81, 131.60)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	60	0.05 (0.05, 0.05)
Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	60	0.80 (0.80, 0.80)
Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	60	0.15 (0.15, 0.15)
Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	60	5.00 (5.00, 5.00)
Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	60	5.04 (4.96, 5.12)
Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	106	42.97 (25.86, 71.39)
Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	106	402.72 (257.62, 629.53)
Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	106	173.85 (125.33, 241.16)
Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	106	199.57 (160.88, 247.56)
Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	106	41.31 (33.87, 50.39)
Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	392	461.29 (324.93, 654.86)
Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	392	15770.77 (12329.03, 20173.30)
Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	392	9980.31 (8002.73, 12446.57)
Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	392	5929.17 (5260.13, 6683.31)
Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	392	1341.33 (1206.32, 1491.45)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	108	1605.20 (984.07, 2618.40)
Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	108	44982.36 (30010.58, 67423.30)
Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	108	27857.30 (19962.25, 38874.83)
Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	108	18324.42 (15234.23, 22041.44)
Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	108	3385.04 (2840.22, 4034.36)
Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	60	0.05 (0.05, 0.05)
Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	60	0.80 (0.80, 0.80)
Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	60	0.15 (0.15, 0.15)
Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	60	5.03 (4.97, 5.09)
Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	60	5.04 (4.96, 5.12)
Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	106	388.64 (200.06, 754.96)
Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	106	11484.07 (6968.52, 18925.69)
Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	106	7070.15 (4740.81, 10543.98)
Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	106	4366.87 (3382.69, 5637.40)
Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	106	965.69 (778.11, 1198.49)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	364	0.05 (0.05, 0.05)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	0.80 (0.80, 0.80)
White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	0.15 (0.15, 0.15)
White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	364	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	364	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	123	0.05 (0.05, 0.05)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	0.80 (0.80, 0.80)
White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	0.15 (0.15, 0.15)
White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	123	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	123	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	64	0.05 (0.05, 0.05)
White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0.80 (0.80, 0.80)
White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0.15 (0.15, 0.15)
White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	64	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	64	5.00 (5.00, 5.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)
White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)
White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)
White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)
White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	364	41.06 (31.51, 53.49)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	444.62 (363.50, 543.85)
White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	290.68 (246.41, 342.91)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	364	255.72 (227.37, 287.61)
White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	364	57.60 (52.24, 63.50)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	123	53.76 (35.74, 80.87)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	703.12 (455.68, 1084.94)
White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	363.42 (262.18, 503.74)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	123	388.43 (322.77, 467.45)
White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	123	86.06 (72.97, 101.49)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	64	0.05 (0.05, 0.05)
White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0.80 (0.80, 0.80)
White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0.15 (0.15, 0.15)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	64	5.06 (4.98, 5.14)
White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	64	5.09 (4.96, 5.22)
White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	122	25.64 (18.01, 36.52)
White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	122	367.32 (265.15, 508.86)
White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	122	176.46 (130.58, 238.44)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	122	166.17 (141.73, 194.83)
White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	122	39.95 (34.43, 46.36)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	364	429.31 (325.12, 566.88)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	15339.37 (12072.43, 19490.37)
White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	8451.21 (6898.39, 10353.56)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	364	5748.65 (5201.26, 6353.65)
White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	364	1336.93 (1209.59, 1477.67)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	123	776.96 (446.42, 1352.24)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	29727.42 (21038.85, 42004.17)
White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	24717.56 (17094.43, 35740.18)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	123	12924.84 (10755.64, 15531.53)
White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	123	2779.22 (2303.45, 3353.26)
White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	64	0.05 (0.05, 0.05)
White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0.80 (0.80, 0.80)
White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0.15 (0.15, 0.15)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	64	5.05 (4.95, 5.14)
White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	64	5.03 (4.97, 5.10)
White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	122	317.61 (216.44, 466.09)
White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	122	10278.20 (6874.74, 15366.60)
White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	122	7342.45 (5384.54, 10012.29)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	122	4559.48 (3711.18, 5601.69)
White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	122	1141.78 (996.05, 1308.83)

Table 7j. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Communities of color

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age, Communities of color						
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	176	0.05 (0.05, 0.05)
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	176	0.80 (0.80, 0.80)
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	176	0.15 (0.15, 0.15)
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	176	5.00 (5.00, 5.00)
Age < 65 Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	176	5.00 (5.00, 5.00)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	60	0.05 (0.05, 0.05)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	0.80 (0.80, 0.80)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	0.15 (0.15, 0.15)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	60	5.00 (5.00, 5.00)
Age < 65 Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	60	5.00 (5.00, 5.00)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)
Age < 65 Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	30	5.07 (4.93, 5.22)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Communities of Color	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)
Age < 65 Communities of Color	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)
Age < 65 Communities of Color	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)
Age < 65 Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)
Age < 65 Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	61	5.00 (5.00, 5.00)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	176	35.93 (26.31, 49.07)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	176	394.71 (299.00, 521.05)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	176	250.74 (199.69, 314.85)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	176	230.32 (197.99, 267.94)
Age < 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	176	55.93 (47.71, 65.57)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	60	72.97 (44.04, 120.89)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	829.16 (497.65, 1381.50)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	411.51 (278.82, 607.34)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	60	423.18 (337.53, 530.56)
Age < 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	60	108.01 (89.95, 129.69)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)
Age < 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	30	5.00 (5.00, 5.00)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	61	37.23 (20.24, 68.47)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	61	337.13 (196.52, 578.35)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	61	133.26 (90.86, 195.46)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	61	184.45 (142.49, 238.75)
Age < 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	61	39.57 (31.22, 50.16)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	176	327.10 (211.80, 505.16)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	176	11007.46 (8141.89, 14881.58)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	176	6875.61 (5233.30, 9033.30)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	176	5288.72 (4552.91, 6143.43)
Age < 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	176	1264.87 (1107.90, 1444.09)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	60	1342.40 (742.55, 2426.82)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	36436.40 (22431.79, 59184.37)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	21382.01 (14290.76, 31992.01)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	60	17557.19 (14083.55, 21887.60)
Age < 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	60	3325.18 (2691.70, 4107.76)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)
Age < 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	30	5.00 (5.00, 5.00)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	61	309.17 (139.46, 685.40)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	61	8935.08 (4923.40, 16215.58)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	61	5285.75 (3306.98, 8448.54)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	61	4133.21 (3044.29, 5611.63)
Age < 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	61	905.71 (699.27, 1173.10)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	184	0.05 (0.05, 0.05)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	0.80 (0.80, 0.80)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	0.15 (0.15, 0.15)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	184	5.00 (5.00, 5.00)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	184	5.00 (5.00, 5.00)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	60	0.05 (0.05, 0.05)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	0.80 (0.80, 0.80)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	0.15 (0.15, 0.15)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	60	5.00 (5.00, 5.00)
Age < 65 White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	60	5.00 (5.00, 5.00)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	31	0.05 (0.05, 0.05)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	31	0.80 (0.80, 0.80)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	31	0.15 (0.15, 0.15)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	31	5.00 (5.00, 5.00)
Age < 65 White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	31	5.00 (5.00, 5.00)

(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)	63	0.05 (0.05, 0.05)
Age < 65 White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)
Age < 65 White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)
Age < 65 White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)
Age < 65 White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	63	5.00 (5.00, 5.00)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	184	32.24 (23.25, 44.70)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	339.77 (265.56, 434.72)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	223.80 (182.92, 273.82)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	184	232.65 (201.26, 268.95)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	184	52.68 (46.77, 59.34)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	60	40.07 (24.22, 66.29)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	537.43 (313.80, 920.42)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	260.79 (174.73, 389.25)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	60	340.93 (271.24, 428.52)
Age < 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	60	77.62 (63.36, 95.07)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	31	0.05 (0.05, 0.05)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	31	0.80 (0.80, 0.80)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	31	0.15 (0.15, 0.15)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	31	5.00 (5.00, 5.00)
Age < 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	31	5.00 (5.00, 5.00)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	63	20.82 (13.53, 32.04)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	63	295.38 (199.28, 437.83)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	63	138.83 (96.34, 200.06)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	63	153.37 (126.39, 186.12)
Age < 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	63	38.13 (31.83, 45.67)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	184	319.29 (227.52, 448.09)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	10837.61 (8089.20, 14519.85)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	5952.20 (4649.86, 7619.31)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	184	5135.31 (4546.20, 5800.77)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	184	1249.66 (1105.17, 1413.04)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	60	472.23 (238.75, 934.03)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	20420.57 (13460.48, 30979.54)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	17832.46 (11331.27, 28063.66)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	60	10958.68 (8748.53, 13727.19)
Age < 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	60	2504.23 (1986.65, 3156.66)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	31	0.05 (0.05, 0.05)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	31	0.80 (0.80, 0.80)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	31	0.15 (0.15, 0.15)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	31	5.00 (5.00, 5.00)
Age < 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	31	5.00 (5.00, 5.00)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	63	254.14 (160.39, 402.68)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	63	7359.13 (4520.46, 11980.38)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	63	5664.16 (3891.33, 8244.68)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	63	4177.43 (3244.58, 5378.50)
Age < 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	63	1099.76 (933.39, 1295.77)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Communities of Color	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	216	0.05 (0.05, 0.05)
Age \geq 65 Communities of Color	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	0.80 (0.80, 0.80)
Age \geq 65 Communities of Color	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	0.15 (0.15, 0.15)
Age \geq 65 Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	216	5.00 (5.00, 5.00)
Age \geq 65 Communities of Color	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	216	5.00 (5.00, 5.00)
Age \geq 65 Communities of Color	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	48	0.05 (0.05, 0.05)
Age \geq 65 Communities of Color	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	0.80 (0.80, 0.80)
Age \geq 65 Communities of Color	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	0.15 (0.15, 0.15)
Age \geq 65 Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	48	5.00 (5.00, 5.00)
Age \geq 65 Communities of Color	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	48	5.00 (5.00, 5.00)
Age \geq 65 Communities of Color	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)
Age \geq 65 Communities of Color	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)
Age \geq 65 Communities of Color	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)
Age \geq 65 Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)
Age \geq 65 Communities of Color	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	30	5.14 (4.87, 5.44)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	45	0.05 (0.05, 0.05)
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	45	0.80 (0.80, 0.80)
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	45	0.15 (0.15, 0.15)
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	45	5.00 (5.00, 5.00)
Age \geq 65 Communities of Color	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	45	5.00 (5.00, 5.00)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	216	126.43 (97.47, 164.00)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	1467.88 (1203.01, 1791.06)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	894.47 (752.49, 1063.23)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	216	419.39 (371.53, 473.43)
Age \geq 65 Communities of Color	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	216	82.80 (74.75, 91.72)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	48	148.89 (97.31, 227.81)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	2370.06 (1614.14, 3479.99)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	1386.46 (940.74, 2043.35)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	48	643.34 (517.46, 799.84)
Age \geq 65 Communities of Color	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	48	136.70 (111.01, 168.34)

(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)	30	0.05 (0.05, 0.05)
Age \geq 65 Communities of Color	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)
Age \geq 65 Communities of Color	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)
Age \geq 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)
Age \geq 65 Communities of Color	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	30	5.15 (4.86, 5.46)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	45	84.29 (51.32, 138.45)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	45	928.81 (593.46, 1453.64)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	45	606.77 (418.27, 880.23)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	45	289.05 (229.10, 364.69)
Age \geq 65 Communities of Color	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	45	50.58 (41.23, 62.06)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	216	1585.64 (1210.30, 2077.37)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	57380.21 (45897.67, 71735.43)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	38054.80 (31544.10, 45909.30)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	216	8939.29 (8044.37, 9933.76)
Age \geq 65 Communities of Color	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	216	1656.10 (1491.72, 1838.59)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	48	3491.55 (2093.92, 5822.05)
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	112398.46 (73016.29, 173021.87)
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	87961.07 (58207.24, 132924.17)
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	48	22068.05 (17363.09, 28047.93)
Age \geq 65 Communities of Color	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	48	3657.96 (3004.55, 4453.48)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	30	5.11 (4.89, 5.34)
Age \geq 65 Communities of Color	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	30	5.15 (4.86, 5.47)
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	45	1139.18 (602.19, 2155.02)
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	45	37368.73 (23365.77, 59763.56)
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	45	27751.46 (18909.11, 40728.70)
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	45	5655.17 (4340.08, 7368.74)
Age \geq 65 Communities of Color	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	45	1305.41 (1026.18, 1660.63)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	180	0.05 (0.05, 0.05)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)
Age \geq 65 White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	63	5.00 (5.00, 5.00)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	33	0.05 (0.05, 0.05)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0.80 (0.80, 0.80)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0.15 (0.15, 0.15)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	33	5.00 (5.00, 5.00)
Age \geq 65 White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	33	5.00 (5.00, 5.00)

(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)	59	0.05 (0.05, 0.05)
Age ≥ 65 White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	59	0.80 (0.80, 0.80)
Age ≥ 65 White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	59	0.15 (0.15, 0.15)
Age ≥ 65 White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	59	5.00 (5.00, 5.00)
Age ≥ 65 White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	59	5.00 (5.00, 5.00)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	180	102.91 (80.39, 131.75)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	1236.06 (998.97, 1529.43)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	785.42 (659.93, 934.76)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	180	366.33 (326.65, 410.83)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	180	80.86 (72.16, 90.61)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	63	161.97 (112.05, 234.15)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	1927.31 (1354.33, 2742.70)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	1262.19 (962.37, 1655.40)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	63	633.68 (537.97, 746.42)
Age ≥ 65 White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	63	126.77 (107.36, 149.69)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	33	0.05 (0.05, 0.05)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0.80 (0.80, 0.80)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0.15 (0.15, 0.15)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	33	5.25 (4.91, 5.60)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	33	5.38 (4.83, 5.99)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	59	57.04 (38.27, 85.02)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	59	847.91 (564.88, 1272.75)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	59	443.01 (318.25, 616.66)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	59	226.02 (186.97, 273.23)
Age \geq 65 White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	59	47.82 (39.50, 57.90)
Age \geq 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	180	1323.04 (954.83, 1833.25)
Age \geq 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	57459.99 (44526.35, 74150.49)
Age \geq 65 White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	32038.65 (25724.71, 39902.29)
Age \geq 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	180	8827.52 (7842.69, 9936.03)
Age \geq 65 White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	180	1728.03 (1547.80, 1929.25)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	GMT/GMC
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	63	5032.58 (3196.33, 7923.74)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	121646.34 (81427.08, 181731.11)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	84148.06 (60933.33, 116207.27)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	63	24006.75 (20209.00, 28518.18)
Age ≥ 65 White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	63	4108.69 (3413.87, 4944.92)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	33	0.05 (0.05, 0.05)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0.80 (0.80, 0.80)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0.15 (0.15, 0.15)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	33	5.20 (4.81, 5.63)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	33	5.15 (4.86, 5.46)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	59	747.35 (438.97, 1272.37)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	59	37050.81 (23905.13, 57425.44)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	59	19880.34 (14002.89, 28224.76)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	59	6379.52 (5161.60, 7884.82)
Age ≥ 65 White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	59	1318.55 (1081.27, 1607.89)

1.8 Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination

Table 8a. 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)	756	0.05 (0.05, 0.05)	43.64 (36.28, 52.49)	61.68 (51.45, 73.95)
	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	756	0.80 (0.80, 0.80)	478.03 (411.95, 554.72)	279.04 (240.46, 323.80)
	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	756	0.15 (0.15, 0.15)	307.44 (272.14, 347.33)	342.21 (302.91, 386.61)
	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	756	5.00 (5.00, 5.00)	258.62 (237.59, 281.50)	27.94 (25.67, 30.41)
	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	756	5.00 (5.00, 5.00)	59.02 (54.61, 63.78)	8.24 (7.62, 8.90)
	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	231	0.05 (0.05, 0.05)	63.91 (47.18, 86.56)	89.32 (65.95, 120.99)
	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	231	0.80 (0.80, 0.80)	810.65 (591.10, 1111.74)	473.19 (345.04, 648.94)
	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	231	0.15 (0.15, 0.15)	417.37 (328.15, 530.85)	464.57 (365.26, 590.88)
	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	231	5.00 (5.00, 5.00)	414.35 (361.56, 474.85)	44.79 (39.09, 51.33)
	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	231	5.00 (5.00, 5.00)	95.76 (85.02, 107.86)	13.35 (11.84, 15.05)
	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	124	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	124	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	124	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	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
	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	124	5.00 (5.00, 5.00)	5.03 (4.99, 5.08)	1.00 (1.00, 1.00)
	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	124	5.04 (4.98, 5.09)	5.07 (4.99, 5.15)	1.01 (0.99, 1.02)
	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	228	0.05 (0.05, 0.05)	32.03 (23.64, 43.39)	44.64 (32.96, 60.45)
	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	228	0.80 (0.80, 0.80)	382.17 (291.58, 500.90)	221.56 (168.25, 291.76)
	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	228	0.15 (0.15, 0.15)	175.33 (140.54, 218.73)	195.16 (156.43, 243.47)
	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	228	5.00 (5.00, 5.00)	179.81 (157.59, 205.16)	19.44 (17.04, 22.18)
	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	228	5.00 (5.00, 5.00)	40.53 (35.93, 45.72)	5.45 (4.75, 6.24)
	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	756	0.05 (0.05, 0.05)	442.90 (356.61, 550.08)	617.47 (496.75, 767.52)
	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	756	0.80 (0.80, 0.80)	15525.12 (13089.55, 18413.87)	9062.32 (7640.63, 10748.55)
	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	756	0.15 (0.15, 0.15)	9083.71 (7831.59, 10536.04)	10110.99 (8717.26, 11727.56)
	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	756	5.00 (5.00, 5.00)	5826.31 (5396.16, 6290.75)	629.87 (583.37, 680.08)
	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	756	5.00 (5.00, 5.00)	1338.84 (1244.61, 1440.20)	187.25 (174.07, 201.43)
	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	231	0.05 (0.05, 0.05)	1033.97 (697.29, 1533.23)	1443.18 (973.01, 2140.55)
	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	231	0.80 (0.80, 0.80)	34994.74 (26856.69, 45598.75)	20427.13 (15676.79, 26616.91)
	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	231	0.15 (0.15, 0.15)	25909.49 (19949.97, 33649.26)	28839.60 (22206.11, 37454.66)

(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	Pseudovirus-nAb ID50	231	5.00 (5.00, 5.00)	14829.72 (12948.92, 16983.72)	1603.21 (1399.88, 1836.08)
	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	231	5.00 (5.00, 5.00)	3003.67 (2625.21, 3436.68)	420.09 (367.16, 480.65)
	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	124	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	124	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	124	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	124	5.00 (5.00, 5.00)	5.04 (4.98, 5.10)	1.00 (1.00, 1.01)
	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	124	5.04 (4.98, 5.09)	5.04 (4.99, 5.09)	1.00 (1.00, 1.00)
	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	228	0.05 (0.05, 0.05)	346.46 (241.30, 497.44)	484.30 (337.31, 695.33)
	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	228	0.80 (0.80, 0.80)	10781.25 (7871.72, 14766.19)	6293.23 (4594.88, 8619.32)
	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	228	0.15 (0.15, 0.15)	7223.90 (5651.04, 9234.54)	8040.85 (6290.12, 10278.87)
	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	228	5.00 (5.00, 5.00)	4475.50 (3810.59, 5256.43)	483.84 (411.96, 568.26)
	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	228	5.00 (5.00, 5.00)	1062.31 (942.02, 1197.95)	148.57 (131.75, 167.55)

Table 8b. 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)	360	0.05 (0.05, 0.05)	33.78 (26.87, 42.48)	47.94 (38.29, 60.02)
Age < 65	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	360	0.80 (0.80, 0.80)	362.44 (301.46, 435.76)	211.57 (175.97, 254.36)
Age < 65	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	360	0.15 (0.15, 0.15)	235.04 (202.15, 273.29)	261.62 (225.01, 304.19)
Age < 65	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	360	5.00 (5.00, 5.00)	231.65 (208.53, 257.33)	25.02 (22.52, 27.80)
Age < 65	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	360	5.00 (5.00, 5.00)	54.06 (49.10, 59.52)	7.54 (6.84, 8.30)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	120	0.05 (0.05, 0.05)	50.95 (35.13, 73.90)	71.22 (49.11, 103.29)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	0.80 (0.80, 0.80)	639.45 (433.70, 942.79)	373.26 (253.16, 550.33)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	0.15 (0.15, 0.15)	313.11 (233.61, 419.65)	348.52 (260.03, 467.11)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	120	5.00 (5.00, 5.00)	371.78 (314.71, 439.20)	40.19 (34.02, 47.48)
Age < 65	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	120	5.00 (5.00, 5.00)	88.61 (76.66, 102.42)	12.34 (10.67, 14.28)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	61	5.03 (4.97, 5.09)	5.00 (5.00, 5.00)	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	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	124	0.05 (0.05, 0.05)	26.89 (18.62, 38.84)	37.52 (25.99, 54.16)
Age < 65	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	124	0.80 (0.80, 0.80)	313.09 (225.99, 433.74)	181.21 (130.03, 252.55)
Age < 65	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	124	0.15 (0.15, 0.15)	136.35 (104.62, 177.70)	151.77 (116.46, 197.79)
Age < 65	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	124	5.00 (5.00, 5.00)	166.35 (141.88, 195.05)	17.98 (15.34, 21.09)
Age < 65	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	124	5.00 (5.00, 5.00)	38.76 (33.51, 44.82)	5.17 (4.38, 6.10)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	360	0.05 (0.05, 0.05)	322.63 (246.67, 421.99)	449.48 (343.28, 588.53)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	360	0.80 (0.80, 0.80)	10910.50 (8835.21, 13473.25)	6368.68 (5157.29, 7864.61)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	360	0.15 (0.15, 0.15)	6333.94 (5273.03, 7608.29)	7050.24 (5869.36, 8468.71)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	360	5.00 (5.00, 5.00)	5200.88 (4730.59, 5717.92)	562.26 (511.42, 618.15)
Age < 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	360	5.00 (5.00, 5.00)	1256.20 (1147.77, 1374.86)	175.69 (160.53, 192.29)
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	120	0.05 (0.05, 0.05)	717.83 (443.04, 1163.03)	1001.55 (617.97, 1623.23)
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	120	0.80 (0.80, 0.80)	25755.07 (18709.39, 35454.06)	15033.75 (10921.04, 20695.25)
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	120	0.15 (0.15, 0.15)	19178.36 (13955.11, 26356.61)	21347.24 (15533.29, 29337.28)
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	120	5.00 (5.00, 5.00)	13237.51 (11221.17, 15616.16)	1431.08 (1213.10, 1688.23)
Age < 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	120	5.00 (5.00, 5.00)	2805.65 (2379.69, 3307.85)	392.40 (332.82, 462.64)

(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	Negative	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	61	5.03 (4.97, 5.09)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	124	0.05 (0.05, 0.05)	277.04 (179.11, 428.53)	387.27 (250.37, 599.03)
Age < 65	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	124	0.80 (0.80, 0.80)	8015.42 (5484.82, 11713.59)	4678.76 (3201.60, 6837.45)
Age < 65	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	124	0.15 (0.15, 0.15)	5494.34 (4090.86, 7379.33)	6115.70 (4553.50, 8213.86)
Age < 65	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	124	5.00 (5.00, 5.00)	4157.91 (3421.13, 5053.37)	449.50 (369.85, 546.31)
Age < 65	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	124	5.00 (5.00, 5.00)	1009.68 (874.13, 1166.24)	141.21 (122.26, 163.11)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	396	0.05 (0.05, 0.05)	112.78 (94.24, 134.97)	157.04 (131.08, 188.14)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	396	0.80 (0.80, 0.80)	1334.32 (1150.75, 1547.17)	778.87 (671.71, 903.12)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	396	0.15 (0.15, 0.15)	832.20 (735.53, 941.57)	926.31 (818.71, 1048.05)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	396	5.00 (5.00, 5.00)	389.06 (357.89, 422.94)	42.06 (38.69, 45.72)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	396	5.00 (5.00, 5.00)	81.72 (75.60, 88.33)	11.43 (10.58, 12.35)

(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	Vaccine	Positive	Anti N IgG (IU/ml)	111	0.05 (0.05, 0.05)	157.06 (118.61, 207.97)	219.53 (165.79, 290.69)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	111	0.80 (0.80, 0.80)	2078.88 (1595.78, 2708.23)	1213.48 (931.49, 1580.85)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	111	0.15 (0.15, 0.15)	1306.33 (1045.26, 1632.61)	1454.07 (1163.47, 1817.25)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	111	5.00 (5.00, 5.00)	637.20 (559.05, 726.29)	68.89 (60.44, 78.52)
Age ≥ 65	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	111	5.00 (5.00, 5.00)	130.32 (114.44, 148.40)	18.23 (16.01, 20.75)
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)	5.13 (4.95, 5.32)	1.00 (1.00, 1.00)
Age ≥ 65	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	63	5.06 (4.94, 5.19)	5.28 (4.95, 5.63)	1.02 (0.98, 1.07)
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	104	0.05 (0.05, 0.05)	66.45 (48.61, 90.84)	92.20 (67.18, 126.52)
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	104	0.80 (0.80, 0.80)	878.67 (648.97, 1189.67)	512.90 (378.81, 694.43)
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	104	0.15 (0.15, 0.15)	500.99 (390.66, 642.49)	557.65 (434.83, 715.15)
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	104	5.00 (5.00, 5.00)	248.84 (214.55, 288.61)	26.90 (23.19, 31.20)
Age ≥ 65	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	104	5.00 (5.00, 5.00)	48.88 (42.45, 56.29)	6.80 (5.90, 7.84)

(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	Negative	Anti N IgG (IU/ml)	396	0.05 (0.05, 0.05)	1434.05 (1153.94, 1782.14)	2004.47 (1612.95, 2491.02)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	396	0.80 (0.80, 0.80)	57424.48 (48305.52, 68264.88)	33519.82 (28196.90, 39847.58)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	396	0.15 (0.15, 0.15)	34588.43 (29833.16, 40101.66)	38500.03 (33207.00, 44636.75)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	396	5.00 (5.00, 5.00)	8877.08 (8188.96, 9623.03)	959.68 (885.29, 1040.33)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	396	5.00 (5.00, 5.00)	1695.64 (1570.15, 1831.16)	237.15 (219.60, 256.11)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	111	0.05 (0.05, 0.05)	4402.15 (3113.03, 6225.12)	6153.20 (4351.30, 8701.28)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	111	0.80 (0.80, 0.80)	118175.62 (87587.00, 159446.92)	68981.48 (51126.29, 93072.36)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	111	0.15 (0.15, 0.15)	85524.41 (66310.18, 110306.20)	95196.36 (73809.19, 122780.73)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	111	5.00 (5.00, 5.00)	23277.99 (20229.41, 26785.99)	2516.54 (2186.96, 2895.78)
Age ≥ 65	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	111	5.00 (5.00, 5.00)	3937.57 (3429.06, 4521.50)	550.71 (479.59, 632.38)
Age ≥ 65	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)	5.16 (4.92, 5.42)	1.01 (0.99, 1.04)
Age ≥ 65	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	63	5.06 (4.94, 5.19)	5.15 (4.94, 5.37)	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	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	104	0.05 (0.05, 0.05)	881.27 (585.70, 1325.97)	1231.81 (818.68, 1853.41)
Age \geq 65	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	104	0.80 (0.80, 0.80)	37174.80 (26889.43, 51394.39)	21699.68 (15695.90, 29999.94)
Age \geq 65	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	104	0.15 (0.15, 0.15)	22649.99 (17454.82, 29391.43)	25211.48 (19428.78, 32715.31)
Age \geq 65	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	104	5.00 (5.00, 5.00)	6085.85 (5156.80, 7182.27)	657.93 (557.49, 776.46)
Age \geq 65	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	104	5.00 (5.00, 5.00)	1313.40 (1126.90, 1530.76)	183.69 (157.61, 214.09)

Table 8c. 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)	378	0.05 (0.05, 0.05)	59.28 (48.71, 72.13)	83.42 (68.75, 101.22)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	0.80 (0.80, 0.80)	619.80 (526.73, 729.32)	361.79 (307.46, 425.72)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	0.15 (0.15, 0.15)	375.02 (325.86, 431.60)	417.43 (362.72, 480.41)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	378	5.00 (5.00, 5.00)	287.14 (261.84, 314.88)	30.96 (28.21, 33.99)
At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	378	5.00 (5.00, 5.00)	65.59 (60.47, 71.13)	9.19 (8.48, 9.96)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	109	0.05 (0.05, 0.05)	74.07 (52.28, 104.94)	103.53 (73.08, 146.68)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	109	0.80 (0.80, 0.80)	904.26 (673.82, 1213.50)	527.83 (393.32, 708.35)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	109	0.15 (0.15, 0.15)	468.34 (362.40, 605.25)	521.30 (403.38, 673.70)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	109	5.00 (5.00, 5.00)	436.83 (371.53, 513.61)	47.22 (40.17, 55.52)
At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	109	5.00 (5.00, 5.00)	100.57 (87.22, 115.96)	13.89 (11.94, 16.15)
At-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	58	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
At-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	58	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
At-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	58	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	58	5.00 (5.00, 5.00)	5.05 (4.95, 5.15)	1.00 (1.00, 1.00)
At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	58	5.13 (4.95, 5.32)	5.00 (5.00, 5.00)	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
At-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	112	0.05 (0.05, 0.05)	33.12 (23.95, 45.80)	45.75 (32.88, 63.64)
At-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	112	0.80 (0.80, 0.80)	441.26 (334.12, 582.76)	257.57 (195.03, 340.17)
At-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	112	0.15 (0.15, 0.15)	196.77 (152.52, 253.86)	219.02 (169.77, 282.57)
At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	112	5.00 (5.00, 5.00)	183.54 (157.83, 213.45)	19.84 (17.06, 23.08)
At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	112	5.00 (5.00, 5.00)	41.54 (36.21, 47.65)	5.68 (4.91, 6.57)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	378	0.05 (0.05, 0.05)	658.36 (521.57, 831.02)	918.35 (727.08, 1159.95)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	0.80 (0.80, 0.80)	22341.77 (18573.14, 26875.09)	13041.34 (10841.51, 15687.53)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	0.15 (0.15, 0.15)	12390.79 (10490.47, 14635.35)	13792.06 (11676.84, 16290.46)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	378	5.00 (5.00, 5.00)	6580.38 (6011.76, 7202.78)	711.39 (649.92, 778.68)
At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	378	5.00 (5.00, 5.00)	1320.45 (1213.71, 1436.57)	184.68 (169.75, 200.92)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	109	0.05 (0.05, 0.05)	1620.01 (1001.61, 2620.20)	2252.03 (1388.20, 3653.41)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	109	0.80 (0.80, 0.80)	39497.25 (27525.38, 56676.17)	23055.34 (16067.12, 33083.02)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	109	0.15 (0.15, 0.15)	28099.59 (20656.04, 38225.48)	31277.37 (22992.03, 42548.40)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	109	5.00 (5.00, 5.00)	15043.24 (13016.25, 17385.89)	1626.30 (1407.16, 1879.56)
At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	109	5.00 (5.00, 5.00)	3015.42 (2586.08, 3516.04)	421.74 (361.69, 491.75)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
At-risk	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	58	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
At-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	58	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
At-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	58	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	58	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	58	5.13 (4.95, 5.32)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
At-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	112	0.05 (0.05, 0.05)	373.98 (250.49, 558.33)	522.86 (350.27, 780.48)
At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	112	0.80 (0.80, 0.80)	13175.28 (9638.84, 18009.23)	7690.68 (5626.38, 10512.35)
At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	112	0.15 (0.15, 0.15)	8459.96 (6305.79, 11350.04)	9416.70 (7018.91, 12633.62)
At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	112	5.00 (5.00, 5.00)	4401.65 (3729.38, 5195.11)	475.85 (403.18, 561.63)
At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	112	5.00 (5.00, 5.00)	1122.35 (977.19, 1289.07)	156.97 (136.67, 180.29)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	378	0.05 (0.05, 0.05)	38.82 (30.40, 49.57)	54.95 (43.22, 69.87)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	0.80 (0.80, 0.80)	432.83 (355.47, 527.03)	252.65 (207.49, 307.64)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	0.15 (0.15, 0.15)	284.94 (242.60, 334.67)	317.17 (270.04, 372.51)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	378	5.00 (5.00, 5.00)	248.47 (222.14, 277.92)	26.86 (24.02, 30.05)
Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	378	5.00 (5.00, 5.00)	56.68 (51.14, 62.82)	7.90 (7.12, 8.76)

(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	Vaccine	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)	60.64 (40.94, 89.82)	84.76 (57.23, 125.54)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)	779.77 (514.53, 1181.75)	455.17 (300.34, 689.81)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)	400.63 (292.59, 548.55)	445.93 (325.68, 610.59)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)	406.65 (341.08, 484.82)	43.96 (36.87, 52.41)
Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)	94.11 (80.74, 109.69)	13.16 (11.29, 15.34)
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	66	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	66	5.00 (5.00, 5.00)	5.03 (4.98, 5.08)	1.00 (1.00, 1.00)
Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	66	5.00 (5.00, 5.00)	5.10 (4.98, 5.21)	1.01 (0.99, 1.02)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	116	0.05 (0.05, 0.05)	31.68 (21.45, 46.77)	44.27 (30.01, 65.31)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	116	0.80 (0.80, 0.80)	364.44 (257.23, 516.35)	210.81 (147.83, 300.60)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	116	0.15 (0.15, 0.15)	168.77 (127.18, 223.97)	187.86 (141.56, 249.30)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	116	5.00 (5.00, 5.00)	178.59 (150.91, 211.35)	19.31 (16.31, 22.85)
Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	116	5.00 (5.00, 5.00)	40.21 (34.48, 46.89)	5.37 (4.51, 6.40)

(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	Vaccine	Negative	Anti N IgG (IU/ml)	378	0.05 (0.05, 0.05)	380.59 (285.70, 507.00)	530.49 (397.78, 707.46)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	378	0.80 (0.80, 0.80)	13507.29 (10771.24, 16938.33)	7884.47 (6287.39, 9887.24)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	378	0.15 (0.15, 0.15)	8066.57 (6628.23, 9817.03)	8978.81 (7377.81, 10927.24)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	378	5.00 (5.00, 5.00)	5561.29 (5029.53, 6149.26)	601.22 (543.73, 664.79)
Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	378	5.00 (5.00, 5.00)	1345.94 (1223.10, 1481.12)	188.24 (171.06, 207.15)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)	881.47 (531.12, 1462.94)	1232.09 (742.38, 2044.85)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)	33521.46 (23944.76, 46928.34)	19567.15 (13977.04, 27393.01)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)	25173.01 (17947.02, 35308.40)	28019.83 (19976.65, 39301.42)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)	14754.58 (12362.99, 17608.82)	1595.09 (1336.54, 1903.66)
Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)	2999.50 (2519.64, 3570.75)	419.51 (352.40, 499.41)
Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	66	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	66	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	66	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	66	5.00 (5.00, 5.00)	5.06 (4.97, 5.14)	1.00 (1.00, 1.01)
Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	66	5.00 (5.00, 5.00)	5.05 (4.98, 5.13)	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)	116	0.05 (0.05, 0.05)	337.82 (212.59, 536.81)	472.19 (297.15, 750.34)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	116	0.80 (0.80, 0.80)	10090.22 (6720.72, 15149.05)	5889.86 (3923.02, 8842.81)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	116	0.15 (0.15, 0.15)	6856.66 (5014.27, 9376.01)	7632.08 (5581.33, 10436.34)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	116	5.00 (5.00, 5.00)	4500.16 (3658.74, 5535.09)	486.50 (395.54, 598.39)
Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	116	5.00 (5.00, 5.00)	1043.19 (894.99, 1215.93)	145.90 (125.17, 170.06)

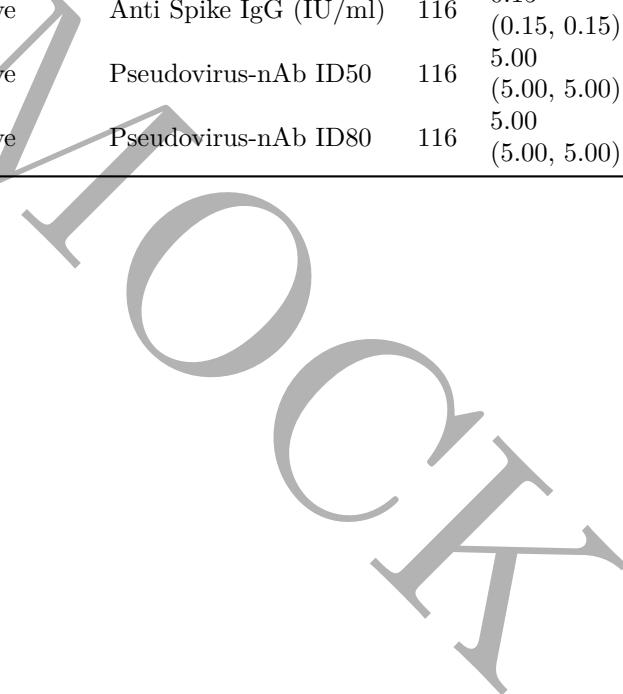


Table 8d. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Risk for Severe Covid-19

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)	180	0.05 (0.05, 0.05)	43.18 (32.88, 56.70)	61.31 (46.99, 80.00)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)	397.20 (318.03, 496.08)	231.85 (185.64, 289.57)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)	244.00 (201.11, 296.04)	271.59 (223.85, 329.52)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)	249.03 (219.07, 283.09)	26.81 (23.54, 30.54)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)	61.01 (54.52, 68.27)	8.56 (7.66, 9.56)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	59	0.05 (0.05, 0.05)	49.48 (30.89, 79.26)	69.16 (43.18, 110.79)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	0.80 (0.80, 0.80)	593.37 (410.70, 857.30)	346.36 (239.73, 500.42)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	0.15 (0.15, 0.15)	281.08 (204.19, 386.92)	312.87 (227.29, 430.68)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	59	5.00 (5.00, 5.00)	353.44 (284.96, 438.37)	38.21 (30.81, 47.39)
Age < 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	59	5.00 (5.00, 5.00)	90.49 (74.65, 109.69)	12.41 (10.09, 15.26)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	29	5.12 (4.88, 5.37)	5.00 (5.00, 5.00)	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 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	66	0.05 (0.05, 0.05)	20.23 (13.05, 31.37)	27.78 (17.74, 43.48)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	66	0.80 (0.80, 0.80)	277.22 (197.27, 389.57)	161.82 (115.15, 227.40)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	66	0.15 (0.15, 0.15)	113.16 (83.62, 153.13)	125.96 (93.08, 170.45)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	66	5.00 (5.00, 5.00)	151.28 (123.98, 184.58)	16.35 (13.40, 19.96)
Age < 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	66	5.00 (5.00, 5.00)	36.32 (30.38, 43.43)	4.89 (4.02, 5.93)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	180	0.05 (0.05, 0.05)	437.34 (317.47, 602.46)	609.26 (441.73, 840.33)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)	14227.35 (11021.14, 18366.29)	8304.79 (6433.26, 10720.77)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)	7015.69 (5620.04, 8757.92)	7809.09 (6255.61, 9748.35)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)	5504.77 (4862.36, 6232.06)	595.11 (525.66, 673.74)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)	1180.39 (1048.33, 1329.10)	165.09 (146.62, 185.89)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	59	0.05 (0.05, 0.05)	856.91 (445.10, 1649.76)	1187.69 (613.81, 2298.12)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	59	0.80 (0.80, 0.80)	21274.96 (13374.99, 33841.05)	12418.62 (7807.25, 19753.70)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	59	0.15 (0.15, 0.15)	16930.25 (11380.64, 25186.06)	18844.89 (12667.68, 28034.35)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	59	5.00 (5.00, 5.00)	12072.87 (10060.75, 14487.41)	1305.17 (1087.65, 1566.21)
Age < 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	59	5.00 (5.00, 5.00)	2581.92 (2116.19, 3150.16)	361.11 (295.97, 440.58)

(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	Negative	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	29	5.12 (4.88, 5.37)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	66	0.05 (0.05, 0.05)	239.76 (144.58, 397.60)	335.25 (202.22, 555.79)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	66	0.80 (0.80, 0.80)	7739.61 (5270.36, 11365.76)	4517.77 (3076.41, 6634.42)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	66	0.15 (0.15, 0.15)	4667.11 (3221.43, 6761.58)	5194.92 (3585.74, 7526.25)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	66	5.00 (5.00, 5.00)	3710.81 (3012.73, 4570.64)	401.17 (325.70, 494.12)
Age < 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	66	5.00 (5.00, 5.00)	995.94 (840.65, 1179.90)	139.29 (117.57, 165.02)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	180	0.05 (0.05, 0.05)	31.58 (23.82, 41.88)	44.81 (33.97, 59.11)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)	353.45 (281.75, 443.39)	206.31 (164.46, 258.82)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)	232.64 (193.41, 279.82)	258.95 (215.28, 311.47)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)	227.09 (199.55, 258.43)	24.55 (21.57, 27.94)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)	52.29 (46.44, 58.88)	7.28 (6.46, 8.20)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)	51.36 (32.59, 80.93)	71.78 (45.56, 113.12)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)	652.49 (402.55, 1057.62)	380.87 (234.98, 617.35)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)	322.37 (224.50, 462.89)	358.82 (249.89, 515.24)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)	376.89 (307.49, 461.96)	40.75 (33.24, 49.94)
Age < 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	61	5.00 (5.00, 5.00)	88.11 (73.85, 105.11)	12.32 (10.33, 14.70)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	32	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	32	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	32	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	32	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	32	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	58	0.05 (0.05, 0.05)	28.90 (18.48, 45.20)	40.49 (25.92, 63.23)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	58	0.80 (0.80, 0.80)	322.88 (216.58, 481.36)	186.48 (124.14, 280.14)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	58	0.15 (0.15, 0.15)	142.94 (103.50, 197.42)	159.11 (115.20, 219.74)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	58	5.00 (5.00, 5.00)	170.40 (140.50, 206.66)	18.42 (15.19, 22.34)
Age < 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	58	5.00 (5.00, 5.00)	39.40 (33.03, 47.00)	5.24 (4.29, 6.41)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	180	0.05 (0.05, 0.05)	296.78 (213.23, 413.08)	413.47 (296.67, 576.26)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)	10143.71 (7824.64, 13150.12)	5921.09 (4567.40, 7675.99)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)	6158.65 (4915.01, 7716.97)	6855.13 (5470.85, 8589.68)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)	5120.43 (4560.11, 5749.59)	553.56 (492.99, 621.58)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)	1277.84 (1144.36, 1426.90)	178.72 (160.05, 199.57)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)	684.30 (380.56, 1230.46)	956.49 (531.93, 1719.90)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)	27119.28 (18434.91, 39894.70)	15830.06 (10760.82, 23287.34)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)	19835.17 (13439.47, 29274.49)	22078.32 (14959.34, 32585.14)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)	13570.89 (11066.69, 16641.76)	1467.12 (1196.40, 1799.11)
Age < 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	61	5.00 (5.00, 5.00)	2869.33 (2344.30, 3511.94)	401.30 (327.87, 491.18)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	32	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	32	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	32	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	32	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	32	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	58	0.05 (0.05, 0.05)	287.37 (168.91, 488.93)	401.68 (236.10, 683.41)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	58	0.80 (0.80, 0.80)	8086.82 (5077.55, 12879.58)	4720.44 (2963.87, 7518.07)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	58	0.15 (0.15, 0.15)	5726.20 (4005.09, 8186.91)	6373.77 (4458.03, 9112.77)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	58	5.00 (5.00, 5.00)	4279.46 (3370.96, 5432.81)	462.64 (364.43, 587.33)
Age < 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	58	5.00 (5.00, 5.00)	1013.19 (850.11, 1207.55)	141.70 (118.90, 168.89)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	198	0.05 (0.05, 0.05)	97.96 (75.55, 127.03)	135.89 (104.51, 176.71)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	0.80 (0.80, 0.80)	1254.78 (1012.74, 1554.66)	732.44 (591.16, 907.48)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	0.15 (0.15, 0.15)	741.21 (620.31, 885.69)	825.04 (690.46, 985.85)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	198	5.00 (5.00, 5.00)	359.84 (318.54, 406.51)	38.90 (34.44, 43.95)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	198	5.00 (5.00, 5.00)	73.56 (65.89, 82.13)	10.30 (9.23, 11.49)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	50	0.05 (0.05, 0.05)	155.59 (101.32, 238.92)	217.48 (141.62, 333.96)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	50	0.80 (0.80, 0.80)	1962.80 (1265.65, 3043.97)	1145.73 (738.79, 1776.82)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	50	0.15 (0.15, 0.15)	1198.00 (851.66, 1685.20)	1333.49 (947.97, 1875.78)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	50	5.00 (5.00, 5.00)	644.98 (524.64, 792.94)	69.73 (56.72, 85.72)
Age ≥ 65 At-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	50	5.00 (5.00, 5.00)	122.14 (101.21, 147.40)	17.08 (14.16, 20.62)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)	5.13 (4.88, 5.40)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	29	5.14 (4.87, 5.42)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	46	0.05 (0.05, 0.05)	84.99 (60.96, 118.48)	118.79 (85.21, 165.60)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	46	0.80 (0.80, 0.80)	1073.54 (717.69, 1605.83)	626.64 (418.93, 937.35)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	46	0.15 (0.15, 0.15)	566.90 (402.05, 799.34)	631.01 (447.52, 889.74)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	46	5.00 (5.00, 5.00)	265.66 (219.29, 321.83)	28.72 (23.71, 34.79)
Age ≥ 65 At-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	46	5.00 (5.00, 5.00)	53.70 (44.26, 65.17)	7.57 (6.30, 9.11)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	198	0.05 (0.05, 0.05)	1259.06 (918.90, 1725.14)	1759.88 (1284.42, 2411.34)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	0.80 (0.80, 0.80)	45686.59 (35971.73, 58025.14)	26668.18 (20997.42, 33870.44)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	0.15 (0.15, 0.15)	30525.75 (24376.05, 38226.94)	33977.91 (27132.74, 42550.02)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	198	5.00 (5.00, 5.00)	8732.03 (7730.16, 9863.76)	944.00 (835.69, 1066.35)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	198	5.00 (5.00, 5.00)	1577.27 (1415.83, 1757.12)	220.60 (198.02, 245.75)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	50	0.05 (0.05, 0.05)	5227.81 (3005.56, 9093.15)	7307.28 (4201.08, 12710.13)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	50	0.80 (0.80, 0.80)	123273.66 (77134.92, 197010.57)	71957.31 (45025.20, 114999.02)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	50	0.15 (0.15, 0.15)	71364.83 (47795.27, 106557.38)	79435.47 (53200.43, 118607.95)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	50	5.00 (5.00, 5.00)	22546.66 (18323.34, 27743.40)	2437.48 (1980.90, 2999.29)
Age ≥ 65 At-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	50	5.00 (5.00, 5.00)	4011.87 (3209.05, 5015.53)	561.10 (448.82, 701.47)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	29	5.14 (4.87, 5.42)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	46	0.05 (0.05, 0.05)	875.25 (477.82, 1603.24)	1223.39 (667.88, 2240.97)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	46	0.80 (0.80, 0.80)	36447.15 (23445.94, 56657.78)	21274.93 (13685.86, 33072.28)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	46	0.15 (0.15, 0.15)	26390.54 (18738.38, 37167.59)	29375.04 (20857.50, 41370.87)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	46	5.00 (5.00, 5.00)	6101.45 (4731.84, 7867.49)	659.62 (511.55, 850.54)
Age ≥ 65 At-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	46	5.00 (5.00, 5.00)	1410.55 (1120.58, 1775.55)	197.28 (156.72, 248.33)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	198	0.05 (0.05, 0.05)	130.13 (101.70, 166.52)	181.89 (142.15, 232.76)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	0.80 (0.80, 0.80)	1420.27 (1158.54, 1741.14)	829.04 (676.26, 1016.34)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	0.15 (0.15, 0.15)	936.05 (789.94, 1109.19)	1041.91 (879.27, 1234.63)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	198	5.00 (5.00, 5.00)	421.16 (376.07, 471.67)	45.53 (40.66, 50.99)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	198	5.00 (5.00, 5.00)	90.93 (81.62, 101.29)	12.72 (11.42, 14.17)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)	158.31 (109.35, 229.20)	221.29 (152.85, 320.36)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)	2182.68 (1590.05, 2996.19)	1274.07 (928.14, 1748.94)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)	1405.84 (1049.89, 1882.47)	1564.83 (1168.62, 2095.36)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)	630.68 (533.79, 745.14)	68.18 (57.71, 80.56)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	61	5.00 (5.00, 5.00)	137.68 (115.13, 164.64)	19.26 (16.10, 23.03)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	34	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	34	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	34	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	34	5.00 (5.00, 5.00)	5.14 (4.87, 5.41)	1.00 (1.00, 1.00)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	34	5.00 (5.00, 5.00)	5.53 (4.92, 6.21)	1.04 (0.96, 1.13)

(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 N IgG (IU/ml)	58	0.05 (0.05, 0.05)	54.72 (33.57, 89.19)	75.47 (45.95, 123.95)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	58	0.80 (0.80, 0.80)	750.12 (486.05, 1157.68)	437.86 (283.72, 675.76)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	58	0.15 (0.15, 0.15)	454.41 (319.55, 646.19)	505.80 (355.68, 719.27)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	58	5.00 (5.00, 5.00)	236.31 (190.12, 293.74)	25.55 (20.55, 31.76)
Age ≥ 65 Not at-risk	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	58	5.00 (5.00, 5.00)	45.38 (37.18, 55.39)	6.24 (5.08, 7.68)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	198	0.05 (0.05, 0.05)	1636.70 (1214.70, 2205.29)	2287.73 (1697.88, 3082.49)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	198	0.80 (0.80, 0.80)	72438.06 (56696.18, 92550.73)	42283.55 (33094.70, 54023.72)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	198	0.15 (0.15, 0.15)	39268.88 (32484.16, 47470.68)	43709.79 (36157.79, 52839.13)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	198	5.00 (5.00, 5.00)	9026.88 (8122.85, 10031.54)	975.88 (878.15, 1084.49)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	198	5.00 (5.00, 5.00)	1824.97 (1637.22, 2034.26)	255.24 (228.98, 284.51)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)	3805.03 (2468.93, 5864.17)	5318.56 (3451.00, 8196.76)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)	114018.04 (77600.41, 167526.34)	66554.61 (45296.91, 97788.48)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)	99712.09 (72401.97, 137323.63)	110988.53 (80589.91, 152853.55)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)	23916.72 (19779.87, 28918.78)	2585.59 (2138.36, 3126.35)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	61	5.00 (5.00, 5.00)	3875.65 (3264.89, 4600.67)	542.05 (456.63, 643.45)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	34	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	34	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	34	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	34	5.00 (5.00, 5.00)	5.31 (4.86, 5.79)	1.02 (0.98, 1.07)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	34	5.00 (5.00, 5.00)	5.29 (4.90, 5.71)	1.00 (1.00, 1.00)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	58	0.05 (0.05, 0.05)	886.05 (508.08, 1545.18)	1238.49 (710.18, 2159.81)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	58	0.80 (0.80, 0.80)	37759.61 (23803.97, 59897.06)	22041.04 (13894.86, 34963.11)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	58	0.15 (0.15, 0.15)	20074.92 (13744.82, 29320.31)	22345.19 (15299.22, 32636.14)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	58	5.00 (5.00, 5.00)	6073.55 (4882.70, 7554.83)	656.60 (527.86, 816.74)
Age ≥ 65 Not at-risk	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	58	5.00 (5.00, 5.00)	1241.44 (1012.38, 1522.32)	173.63 (141.59, 212.91)

Table 8e. 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)	325	0.05 (0.05, 0.05)	35.73 (27.60, 46.26)	50.14 (38.85, 64.70)
Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	325	0.80 (0.80, 0.80)	408.17 (328.51, 507.15)	238.26 (191.76, 296.03)
Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	325	0.15 (0.15, 0.15)	268.04 (222.09, 323.50)	298.36 (247.21, 360.08)
Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	325	5.00 (5.00, 5.00)	234.63 (208.87, 263.58)	25.33 (22.55, 28.47)
Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	325	5.00 (5.00, 5.00)	55.67 (49.52, 62.58)	7.70 (6.82, 8.69)
Male	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	96	0.05 (0.05, 0.05)	82.92 (53.27, 129.07)	115.90 (74.46, 180.41)
Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	96	0.80 (0.80, 0.80)	916.03 (597.66, 1403.97)	534.70 (348.87, 819.53)
Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	96	0.15 (0.15, 0.15)	551.61 (386.90, 786.43)	613.99 (430.65, 875.37)
Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	96	5.00 (5.00, 5.00)	454.94 (367.86, 562.63)	49.18 (39.77, 60.82)
Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	96	5.00 (5.00, 5.00)	102.09 (83.27, 125.16)	14.28 (11.65, 17.51)
Male	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	49	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Male	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	49	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Male	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	49	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	49	5.00 (5.00, 5.00)	5.08 (4.97, 5.19)	1.00 (1.00, 1.00)
Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	49	5.04 (4.96, 5.11)	5.00 (5.00, 5.00)	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
Male	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	106	0.05 (0.05, 0.05)	24.60 (17.02, 35.55)	34.16 (23.61, 49.42)
Male	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	106	0.80 (0.80, 0.80)	316.27 (226.83, 440.98)	184.61 (132.41, 257.41)
Male	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	106	0.15 (0.15, 0.15)	150.42 (112.72, 200.73)	167.43 (125.47, 223.43)
Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	106	5.00 (5.00, 5.00)	165.07 (140.09, 194.49)	17.84 (15.14, 21.03)
Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	106	5.00 (5.00, 5.00)	39.87 (33.21, 47.88)	5.27 (4.25, 6.54)
Male	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	325	0.05 (0.05, 0.05)	380.77 (277.84, 521.84)	529.63 (385.29, 728.03)
Male	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	325	0.80 (0.80, 0.80)	13533.28 (11029.52, 16605.41)	7899.65 (6438.15, 9692.91)
Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	325	0.15 (0.15, 0.15)	7771.48 (6160.25, 9804.13)	8650.35 (6856.91, 10912.88)
Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	325	5.00 (5.00, 5.00)	5527.99 (4908.12, 6226.14)	597.62 (530.61, 673.10)
Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	325	5.00 (5.00, 5.00)	1280.14 (1145.14, 1431.05)	179.04 (160.16, 200.15)
Male	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	96	0.05 (0.05, 0.05)	1473.17 (729.72, 2974.04)	2059.15 (1019.98, 4157.02)
Male	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	96	0.80 (0.80, 0.80)	45491.95 (29036.52, 71272.93)	26554.56 (16949.20, 41603.44)
Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	96	0.15 (0.15, 0.15)	31608.49 (21476.07, 46521.39)	35183.09 (23904.80, 51782.50)
Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	96	5.00 (5.00, 5.00)	17069.85 (13630.63, 21376.84)	1845.39 (1473.58, 2311.01)
Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	96	5.00 (5.00, 5.00)	3179.99 (2632.21, 3841.77)	444.75 (368.14, 537.31)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Male	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	49	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Male	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	49	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Male	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	49	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	49	5.00 (5.00, 5.00)	5.09 (4.95, 5.24)	1.01 (0.99, 1.02)
Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	49	5.04 (4.96, 5.11)	5.04 (4.96, 5.12)	1.00 (1.00, 1.00)
Male	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	106	0.05 (0.05, 0.05)	245.91 (143.25, 422.16)	343.73 (200.23, 590.08)
Male	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	106	0.80 (0.80, 0.80)	8699.01 (5973.03, 12669.08)	5077.79 (3486.58, 7395.20)
Male	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	106	0.15 (0.15, 0.15)	5456.50 (3910.97, 7612.80)	6073.58 (4353.26, 8473.73)
Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	106	5.00 (5.00, 5.00)	4419.86 (3593.90, 5435.63)	477.82 (388.53, 587.64)
Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	106	5.00 (5.00, 5.00)	1023.05 (873.98, 1197.54)	143.08 (122.23, 167.49)
Female	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	431	0.05 (0.05, 0.05)	50.27 (38.82, 65.10)	71.41 (55.45, 91.97)
Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	431	0.80 (0.80, 0.80)	534.54 (435.45, 656.16)	312.02 (254.18, 383.01)
Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	431	0.15 (0.15, 0.15)	338.75 (287.81, 398.69)	377.06 (320.36, 443.78)
Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	431	5.00 (5.00, 5.00)	277.04 (245.98, 312.01)	29.94 (26.58, 33.72)
Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	431	5.00 (5.00, 5.00)	61.50 (55.42, 68.25)	8.64 (7.80, 9.57)

(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	Vaccine	Positive	Anti N IgG (IU/ml)	135	0.05 (0.05, 0.05)	54.79 (36.48, 82.31)	76.59 (50.98, 115.05)
Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	135	0.80 (0.80, 0.80)	754.21 (488.52, 1164.38)	440.25 (285.16, 679.67)
Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	135	0.15 (0.15, 0.15)	354.00 (256.55, 488.47)	394.03 (285.56, 543.71)
Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	135	5.00 (5.00, 5.00)	392.10 (328.64, 467.82)	42.39 (35.53, 50.58)
Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	135	5.00 (5.00, 5.00)	92.21 (79.37, 107.12)	12.83 (11.03, 14.92)
Female	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	75	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Female	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	75	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Female	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	75	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	75	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	75	5.04 (4.96, 5.12)	5.12 (4.98, 5.26)	1.01 (0.99, 1.03)
Female	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)	39.49 (25.50, 61.15)	55.19 (35.69, 85.34)
Female	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)	444.10 (297.05, 663.97)	256.07 (169.44, 387.00)
Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)	198.00 (144.09, 272.08)	220.39 (160.38, 302.85)
Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)	192.44 (159.14, 232.72)	20.80 (17.20, 25.16)
Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)	41.06 (35.01, 48.17)	5.59 (4.70, 6.65)

(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	Vaccine	Negative	Anti N IgG (IU/ml)	431	0.05 (0.05, 0.05)	492.86 (365.71, 664.20)	688.24 (510.64, 927.60)
Female	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	431	0.80 (0.80, 0.80)	17107.99 (13216.22, 22145.76)	9986.28 (7714.57, 12926.93)
Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	431	0.15 (0.15, 0.15)	10143.19 (8328.92, 12352.65)	11290.28 (9270.83, 13749.61)
Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	431	5.00 (5.00, 5.00)	6046.91 (5463.04, 6693.19)	653.72 (590.60, 723.59)
Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	431	5.00 (5.00, 5.00)	1381.96 (1254.89, 1521.90)	193.28 (175.51, 212.85)
Female	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	135	0.05 (0.05, 0.05)	838.91 (516.31, 1363.08)	1169.93 (719.70, 1901.83)
Female	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	135	0.80 (0.80, 0.80)	29972.37 (21490.80, 41801.29)	17495.47 (12544.61, 24400.25)
Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	135	0.15 (0.15, 0.15)	23039.26 (16238.88, 32687.46)	25644.77 (18075.33, 36384.08)
Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	135	5.00 (5.00, 5.00)	13647.49 (11455.34, 16259.15)	1475.40 (1238.42, 1757.75)
Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	135	5.00 (5.00, 5.00)	2904.16 (2416.88, 3489.69)	406.18 (338.03, 488.07)
Female	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	75	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Female	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	75	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Female	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	75	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	75	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	75	5.04 (4.96, 5.12)	5.03 (4.97, 5.10)	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
Female	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)	454.77 (285.53, 724.33)	635.74 (399.16, 1012.53)
Female	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)	12783.05 (7966.70, 20511.19)	7461.73 (4650.32, 11972.80)
Female	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)	9025.72 (6465.76, 12599.25)	10046.44 (7196.97, 14024.09)
Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)	4520.15 (3568.73, 5725.23)	488.67 (385.81, 618.94)
Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)	1094.53 (915.38, 1308.76)	153.08 (128.02, 183.04)

Table 8f. 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)	215	0.05 (0.05, 0.05)	39.99 (29.17, 54.83)	57.07 (41.91, 77.70)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	215	0.80 (0.80, 0.80)	419.10 (326.91, 537.30)	244.64 (190.82, 313.63)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	215	0.15 (0.15, 0.15)	268.08 (220.35, 326.14)	298.40 (245.27, 363.03)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	215	5.00 (5.00, 5.00)	252.13 (217.99, 291.62)	27.25 (23.55, 31.51)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	215	5.00 (5.00, 5.00)	56.62 (49.88, 64.28)	7.96 (7.03, 9.02)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	72	0.05 (0.05, 0.05)	44.64 (27.40, 72.71)	62.39 (38.31, 101.63)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	0.80 (0.80, 0.80)	594.81 (353.00, 1002.26)	347.20 (206.05, 585.04)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	0.15 (0.15, 0.15)	265.31 (181.19, 388.49)	295.31 (201.68, 432.42)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	72	5.00 (5.00, 5.00)	356.30 (288.35, 440.27)	38.52 (31.17, 47.60)
Age < 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	72	5.00 (5.00, 5.00)	87.03 (72.77, 104.08)	12.09 (10.09, 14.49)
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	33	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	33	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	33	5.06 (4.95, 5.17)	5.00 (5.00, 5.00)	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)	68	0.05 (0.05, 0.05)	36.51 (21.61, 61.68)	51.02 (30.25, 86.05)
Age < 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	68	0.80 (0.80, 0.80)	380.85 (235.36, 616.27)	219.02 (133.56, 359.16)
Age < 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	68	0.15 (0.15, 0.15)	164.16 (112.61, 239.30)	182.72 (125.34, 266.36)
Age < 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	68	5.00 (5.00, 5.00)	186.51 (148.64, 234.02)	20.16 (16.07, 25.30)
Age < 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	68	5.00 (5.00, 5.00)	39.56 (32.73, 47.81)	5.35 (4.34, 6.58)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	215	0.05 (0.05, 0.05)	362.95 (252.51, 521.70)	506.71 (352.48, 728.43)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	215	0.80 (0.80, 0.80)	12245.40 (8956.06, 16742.82)	7147.88 (5227.83, 9773.12)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	215	0.15 (0.15, 0.15)	7284.09 (5747.31, 9231.79)	8107.85 (6397.28, 10275.81)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	215	5.00 (5.00, 5.00)	5367.65 (4747.25, 6069.14)	580.29 (513.22, 656.12)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	215	5.00 (5.00, 5.00)	1314.23 (1168.61, 1478.00)	183.81 (163.44, 206.71)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	72	0.05 (0.05, 0.05)	578.63 (325.53, 1028.50)	806.54 (453.48, 1434.47)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	72	0.80 (0.80, 0.80)	21927.97 (14843.97, 32392.69)	12799.80 (8664.72, 18908.26)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	72	0.15 (0.15, 0.15)	17468.55 (11529.78, 26466.28)	19444.07 (12833.68, 29459.35)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	72	5.00 (5.00, 5.00)	12451.85 (10105.81, 15342.52)	1346.15 (1092.52, 1658.65)
Age < 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	72	5.00 (5.00, 5.00)	2703.66 (2169.49, 3369.35)	378.13 (303.42, 471.24)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	33	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	33	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	33	5.06 (4.95, 5.17)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	68	0.05 (0.05, 0.05)	366.67 (211.05, 637.03)	512.58 (295.05, 890.50)
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	68	0.80 (0.80, 0.80)	9897.29 (5633.97, 17386.74)	5777.25 (3288.66, 10148.99)
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	68	0.15 (0.15, 0.15)	7519.92 (5061.86, 11171.64)	8370.35 (5634.31, 12435.04)
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	68	5.00 (5.00, 5.00)	4305.00 (3241.63, 5717.19)	465.41 (350.45, 618.07)
Age < 65 Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	68	5.00 (5.00, 5.00)	1045.82 (846.62, 1291.89)	146.27 (118.41, 180.68)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	145	0.05 (0.05, 0.05)	26.37 (19.17, 36.27)	37.11 (27.10, 50.82)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	145	0.80 (0.80, 0.80)	292.79 (224.33, 382.15)	170.91 (130.95, 223.07)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	145	0.15 (0.15, 0.15)	193.74 (153.96, 243.79)	215.65 (171.37, 271.36)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	145	5.00 (5.00, 5.00)	204.53 (177.27, 235.99)	22.08 (19.13, 25.48)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	145	5.00 (5.00, 5.00)	50.50 (43.62, 58.46)	6.96 (5.97, 8.10)

(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 N IgG (IU/ml)	48	0.05 (0.05, 0.05)	64.79 (37.38, 112.29)	90.56 (52.25, 156.95)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	0.80 (0.80, 0.80)	729.25 (428.27, 1241.76)	425.68 (249.99, 724.84)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	0.15 (0.15, 0.15)	423.02 (274.63, 651.58)	470.86 (305.69, 725.27)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	48	5.00 (5.00, 5.00)	401.63 (308.89, 522.22)	43.42 (33.39, 56.46)
Age < 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	48	5.00 (5.00, 5.00)	91.55 (71.22, 117.69)	12.80 (9.96, 16.46)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	28	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	28	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	28	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	28	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	56	0.05 (0.05, 0.05)	17.99 (11.69, 27.68)	25.04 (16.26, 38.56)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	56	0.80 (0.80, 0.80)	241.95 (163.74, 357.53)	141.23 (95.58, 208.70)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	56	0.15 (0.15, 0.15)	106.81 (76.81, 148.54)	118.89 (85.50, 165.33)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	56	5.00 (5.00, 5.00)	143.11 (118.10, 173.42)	15.47 (12.77, 18.75)
Age < 65 Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	56	5.00 (5.00, 5.00)	37.73 (30.14, 47.22)	4.94 (3.79, 6.45)

(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 N IgG (IU/ml)	145	0.05 (0.05, 0.05)	271.37 (183.68, 400.92)	376.90 (254.09, 559.07)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	145	0.80 (0.80, 0.80)	9208.58 (7224.81, 11737.05)	5375.23 (4217.27, 6851.15)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	145	0.15 (0.15, 0.15)	5158.07 (3892.19, 6835.65)	5741.39 (4332.36, 7608.70)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	145	5.00 (5.00, 5.00)	4965.20 (4279.36, 5760.94)	536.78 (462.63, 622.80)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	145	5.00 (5.00, 5.00)	1175.54 (1021.88, 1352.30)	164.41 (142.92, 189.13)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	48	0.05 (0.05, 0.05)	1061.83 (438.31, 2572.37)	1484.20 (612.65, 3595.59)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	0.80 (0.80, 0.80)	34494.73 (19897.90, 59799.59)	20135.26 (11614.80, 34906.22)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	0.15 (0.15, 0.15)	22723.11 (14234.89, 36272.81)	25292.86 (15844.72, 40374.90)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	48	5.00 (5.00, 5.00)	14793.40 (11209.43, 19523.26)	1599.29 (1211.83, 2110.62)
Age < 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	48	5.00 (5.00, 5.00)	3000.82 (2371.61, 3796.97)	419.70 (331.69, 531.04)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	28	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	28	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	28	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	28	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	28	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	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 Male	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	56	0.05 (0.05, 0.05)	191.61 (99.12, 370.41)	267.83 (138.55, 517.75)
Age < 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	56	0.80 (0.80, 0.80)	6073.55 (3925.70, 9396.56)	3545.26 (2291.51, 5484.96)
Age < 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	56	0.15 (0.15, 0.15)	3635.98 (2483.17, 5323.98)	4047.18 (2764.00, 5926.07)
Age < 65 Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	56	5.00 (5.00, 5.00)	3972.04 (3088.80, 5107.83)	429.41 (333.92, 552.20)
Age < 65 Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	56	5.00 (5.00, 5.00)	964.02 (795.92, 1167.63)	134.83 (111.32, 163.30)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	180	0.05 (0.05, 0.05)	98.88 (75.27, 129.90)	137.35 (104.29, 180.87)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)	1241.85 (1007.30, 1531.01)	724.89 (587.98, 893.68)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)	795.08 (670.10, 943.38)	885.00 (745.88, 1050.07)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)	371.62 (326.41, 423.09)	40.17 (35.29, 45.74)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)	77.18 (68.92, 86.44)	10.79 (9.64, 12.09)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	48	0.05 (0.05, 0.05)	184.25 (117.91, 287.92)	257.54 (164.80, 402.45)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	0.80 (0.80, 0.80)	1915.88 (1267.56, 2895.79)	1118.34 (739.90, 1690.33)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	0.15 (0.15, 0.15)	1302.11 (913.47, 1856.10)	1449.36 (1016.77, 2066.00)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	48	5.00 (5.00, 5.00)	680.95 (546.64, 848.26)	73.62 (59.10, 91.70)
Age ≥ 65 Male	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	48	5.00 (5.00, 5.00)	145.22 (117.79, 179.04)	20.31 (16.47, 25.04)

(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	Placebo	Negative	Anti N IgG (IU/ml)	21	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	21	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	21	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	21	5.00 (5.00, 5.00)	5.41 (4.87, 6.01)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	21	5.19 (4.83, 5.58)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	50	0.05 (0.05, 0.05)	78.47 (49.60, 124.15)	108.02 (67.49, 172.89)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	50	0.80 (0.80, 0.80)	853.28 (542.22, 1342.80)	498.08 (316.51, 783.82)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	50	0.15 (0.15, 0.15)	534.86 (378.77, 755.27)	595.35 (421.61, 840.69)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	50	5.00 (5.00, 5.00)	280.10 (228.49, 343.37)	30.28 (24.70, 37.12)
Age ≥ 65 Male	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	50	5.00 (5.00, 5.00)	48.96 (39.85, 60.16)	6.72 (5.41, 8.34)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	180	0.05 (0.05, 0.05)	1183.98 (862.56, 1625.19)	1654.94 (1205.66, 2271.64)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)	49137.16 (38411.18, 62858.28)	28682.35 (22421.38, 36691.64)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)	30669.19 (24487.54, 38411.33)	34137.57 (27256.84, 42755.27)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)	7920.23 (7016.63, 8940.20)	856.24 (758.55, 966.51)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)	1703.09 (1525.12, 1901.81)	238.19 (213.30, 265.99)

(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	Positive	Anti N IgG (IU/ml)	48	0.05 (0.05, 0.05)	4250.12 (2504.26, 7213.11)	5940.69 (3500.39, 10082.27)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	0.80 (0.80, 0.80)	111389.34 (67860.86, 182838.61)	65020.19 (39611.74, 106726.56)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	0.15 (0.15, 0.15)	91968.70 (62592.53, 135131.80)	102369.43 (69671.12, 150413.84)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	48	5.00 (5.00, 5.00)	27125.98 (21887.11, 33618.82)	2932.54 (2366.17, 3634.47)
Age ≥ 65 Male	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	48	5.00 (5.00, 5.00)	3836.43 (3081.74, 4775.95)	536.56 (431.01, 667.97)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	21	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	21	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	21	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	21	5.00 (5.00, 5.00)	5.50 (4.79, 6.31)	1.04 (0.97, 1.11)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	21	5.19 (4.83, 5.58)	5.21 (4.82, 5.63)	1.00 (1.00, 1.00)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	50	0.05 (0.05, 0.05)	619.83 (348.04, 1103.85)	866.38 (486.49, 1542.93)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	50	0.80 (0.80, 0.80)	32930.04 (20702.56, 52379.41)	19221.93 (12084.50, 30574.91)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	50	0.15 (0.15, 0.15)	24554.13 (17127.70, 35200.61)	27330.96 (19064.67, 39181.45)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	50	5.00 (5.00, 5.00)	6566.19 (5137.16, 8392.74)	709.86 (555.37, 907.32)
Age ≥ 65 Male	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	50	5.00 (5.00, 5.00)	1275.03 (1067.55, 1522.85)	178.33 (149.31, 212.99)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	216	0.05 (0.05, 0.05)	125.51 (98.97, 159.17)	175.12 (137.97, 222.26)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	0.80 (0.80, 0.80)	1414.54 (1149.84, 1740.17)	825.69 (671.18, 1015.77)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	0.15 (0.15, 0.15)	863.64 (724.66, 1029.27)	961.31 (806.62, 1145.67)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	216	5.00 (5.00, 5.00)	403.84 (362.30, 450.14)	43.66 (39.17, 48.66)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	216	5.00 (5.00, 5.00)	85.60 (76.95, 95.22)	11.98 (10.78, 13.32)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)	138.85 (97.51, 197.70)	194.08 (136.30, 276.34)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)	2214.10 (1571.25, 3119.97)	1292.42 (917.17, 1821.19)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)	1309.61 (984.71, 1741.71)	1457.71 (1096.07, 1938.67)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)	605.37 (517.92, 707.59)	65.45 (55.99, 76.50)
Age ≥ 65 Female	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	63	5.00 (5.00, 5.00)	119.87 (102.23, 140.55)	16.77 (14.30, 19.66)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	42	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	42	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	42	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	42	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	42	5.00 (5.00, 5.00)	5.42 (4.93, 5.97)	1.03 (0.97, 1.10)

(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)	54	0.05 (0.05, 0.05)	56.76 (37.22, 86.56)	79.34 (52.02, 121.00)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	54	0.80 (0.80, 0.80)	903.43 (603.59, 1352.23)	527.35 (352.33, 789.32)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	54	0.15 (0.15, 0.15)	470.86 (329.07, 673.75)	524.11 (366.28, 749.95)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	54	5.00 (5.00, 5.00)	222.43 (180.26, 274.45)	24.05 (19.49, 29.67)
Age ≥ 65 Female	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	54	5.00 (5.00, 5.00)	48.81 (40.20, 59.26)	6.88 (5.70, 8.30)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	216	0.05 (0.05, 0.05)	1675.75 (1246.24, 2253.31)	2342.32 (1741.95, 3149.61)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	0.80 (0.80, 0.80)	65180.88 (51272.37, 82862.32)	38047.39 (29928.71, 48368.40)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	0.15 (0.15, 0.15)	38140.62 (31384.20, 46351.58)	42453.94 (34933.43, 51593.48)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	216	5.00 (5.00, 5.00)	9739.47 (8755.84, 10833.62)	1052.92 (946.58, 1171.20)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	216	5.00 (5.00, 5.00)	1689.61 (1518.65, 1879.83)	236.31 (212.40, 262.91)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)	4523.19 (2860.34, 7152.74)	6322.39 (3998.10, 9997.89)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)	123694.43 (85657.93, 178621.08)	72202.92 (50000.25, 104264.70)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)	80861.33 (57753.44, 113214.98)	90005.93 (64284.77, 126018.46)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)	20685.66 (17314.24, 24713.57)	2236.29 (1871.81, 2671.74)
Age ≥ 65 Female	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	63	5.00 (5.00, 5.00)	4017.45 (3365.13, 4796.22)	561.88 (470.65, 670.80)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	42	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	42	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	42	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	42	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	42	5.00 (5.00, 5.00)	5.13 (4.88, 5.38)	1.00 (1.00, 1.00)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	54	0.05 (0.05, 0.05)	1230.33 (697.35, 2170.67)	1719.72 (974.74, 3034.09)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	54	0.80 (0.80, 0.80)	41703.90 (26588.92, 65411.26)	24343.40 (15520.49, 38181.87)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	54	0.15 (0.15, 0.15)	20981.08 (14398.27, 30573.51)	23353.83 (16026.57, 34031.07)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	54	5.00 (5.00, 5.00)	5662.89 (4541.79, 7060.71)	612.20 (491.00, 763.32)
Age ≥ 65 Female	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	54	5.00 (5.00, 5.00)	1350.84 (1056.21, 1727.66)	188.93 (147.72, 241.63)

Table 8g. 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)	115	0.05 (0.05, 0.05)	42.13 (23.60, 75.21)	61.85 (35.55, 107.61)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	115	0.80 (0.80, 0.80)	491.43 (292.25, 826.38)	286.86 (170.59, 482.37)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	115	0.15 (0.15, 0.15)	341.22 (227.33, 512.17)	379.81 (253.04, 570.09)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	115	5.00 (5.00, 5.00)	250.45 (192.03, 326.66)	26.91 (20.60, 35.17)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	115	5.00 (5.00, 5.00)	65.10 (50.29, 84.27)	9.05 (6.97, 11.75)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)	73.32 (35.19, 152.74)	102.48 (49.19, 213.49)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)	958.71 (389.66, 2358.79)	559.62 (227.45, 1376.87)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)	506.17 (276.73, 925.85)	563.42 (308.03, 1030.55)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)	488.33 (328.76, 725.36)	52.79 (35.54, 78.42)
Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	29	5.00 (5.00, 5.00)	130.30 (92.68, 183.19)	18.22 (12.96, 25.62)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	16	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	16	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	16	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	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
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	27	0.05 (0.05, 0.05)	33.50 (17.23, 65.13)	46.77 (24.05, 90.97)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	27	0.80 (0.80, 0.80)	377.54 (202.81, 702.81)	220.38 (118.38, 410.25)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	27	0.15 (0.15, 0.15)	127.47 (72.54, 224.00)	141.88 (80.74, 249.33)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	27	5.00 (5.00, 5.00)	167.68 (122.53, 229.48)	18.13 (13.25, 24.81)
Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	27	5.00 (5.00, 5.00)	35.14 (24.29, 50.82)	4.65 (3.02, 7.16)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	115	0.05 (0.05, 0.05)	646.14 (331.54, 1259.27)	898.80 (460.62, 1753.81)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	115	0.80 (0.80, 0.80)	16880.81 (9915.67, 28738.51)	9853.66 (5787.98, 16775.24)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	115	0.15 (0.15, 0.15)	10290.17 (6529.63, 16216.48)	11453.89 (7268.07, 18050.40)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	115	5.00 (5.00, 5.00)	5633.49 (4263.48, 7443.73)	609.03 (460.92, 804.73)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	115	5.00 (5.00, 5.00)	1299.55 (1081.50, 1561.57)	181.76 (151.26, 218.40)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	29	0.05 (0.05, 0.05)	2361.11 (860.83, 6476.16)	3250.97 (1170.69, 9027.85)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	29	0.80 (0.80, 0.80)	66810.96 (26355.86, 169362.87)	38998.90 (15384.45, 98860.50)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	29	0.15 (0.15, 0.15)	19623.56 (9531.75, 40400.17)	21842.79 (10609.69, 44969.02)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	29	5.00 (5.00, 5.00)	18131.58 (12027.32, 27333.97)	1960.17 (1300.25, 2955.02)
Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	29	5.00 (5.00, 5.00)	2871.89 (2057.28, 4009.06)	401.66 (287.73, 560.71)

(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	Negative	Anti N IgG (IU/ml)	16	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	16	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	16	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	16	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	16	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	27	0.05 (0.05, 0.05)	421.38 (146.98, 1208.07)	589.00 (205.45, 1688.60)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	27	0.80 (0.80, 0.80)	5832.92 (3719.30, 9147.68)	3404.79 (2171.03, 5339.68)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	27	0.15 (0.15, 0.15)	8718.57 (4671.50, 16271.78)	9704.56 (5199.79, 18111.95)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	27	5.00 (5.00, 5.00)	3785.33 (2431.92, 5891.93)	409.22 (262.91, 636.97)
Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	27	5.00 (5.00, 5.00)	812.86 (499.53, 1322.75)	113.69 (69.86, 185.00)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	617	0.05 (0.05, 0.05)	43.49 (35.64, 53.06)	61.17 (50.27, 74.43)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	617	0.80 (0.80, 0.80)	471.23 (402.48, 551.72)	275.07 (234.94, 322.05)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	617	0.15 (0.15, 0.15)	301.50 (264.57, 343.59)	335.60 (294.49, 382.44)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	617	5.00 (5.00, 5.00)	259.55 (236.90, 284.37)	28.06 (25.61, 30.74)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	617	5.00 (5.00, 5.00)	58.61 (53.95, 63.67)	8.18 (7.53, 8.89)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	192	0.05 (0.05, 0.05)	60.79 (43.56, 84.84)	84.98 (60.89, 118.58)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	192	0.80 (0.80, 0.80)	789.28 (557.62, 1117.18)	460.72 (325.50, 652.12)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	192	0.15 (0.15, 0.15)	395.43 (303.86, 514.59)	440.15 (338.23, 572.79)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	192	5.00 (5.00, 5.00)	401.25 (346.18, 465.08)	43.38 (37.42, 50.28)
Not Hispanic or Latino	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	192	5.00 (5.00, 5.00)	90.71 (79.89, 102.99)	12.64 (11.12, 14.36)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	105	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	105	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	105	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	105	5.00 (5.00, 5.00)	5.04 (4.99, 5.09)	1.00 (1.00, 1.00)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	105	5.04 (4.98, 5.11)	5.08 (4.99, 5.17)	1.01 (0.99, 1.02)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	197	0.05 (0.05, 0.05)	31.50 (22.59, 43.93)	43.89 (31.49, 61.18)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	197	0.80 (0.80, 0.80)	380.24 (282.81, 511.23)	220.25 (162.93, 297.74)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	197	0.15 (0.15, 0.15)	179.86 (141.59, 228.48)	200.20 (157.60, 254.32)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	197	5.00 (5.00, 5.00)	180.48 (156.33, 208.35)	19.51 (16.90, 22.52)
Not Hispanic or Latino	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	197	5.00 (5.00, 5.00)	41.07 (36.16, 46.65)	5.53 (4.79, 6.38)

(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	Vaccine	Negative	Anti N IgG (IU/ml)	617	0.05 (0.05, 0.05)	424.40 (335.96, 536.12)	591.81 (468.02, 748.33)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	617	0.80 (0.80, 0.80)	15177.42 (12612.30, 18264.25)	8859.37 (7362.05, 10661.21)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	617	0.15 (0.15, 0.15)	8957.40 (7622.67, 10525.84)	9970.39 (8484.71, 11716.20)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	617	5.00 (5.00, 5.00)	5850.58 (5397.25, 6341.99)	632.50 (583.49, 685.62)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	617	5.00 (5.00, 5.00)	1347.26 (1242.57, 1460.78)	188.43 (173.79, 204.30)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	192	0.05 (0.05, 0.05)	895.24 (582.59, 1375.68)	1251.34 (814.33, 1922.89)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	192	0.80 (0.80, 0.80)	31294.34 (23695.05, 41330.83)	18267.14 (13831.27, 24125.63)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	192	0.15 (0.15, 0.15)	26107.79 (19593.72, 34787.50)	29060.31 (21809.57, 38721.61)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	192	5.00 (5.00, 5.00)	14264.14 (12313.15, 16524.25)	1542.07 (1331.15, 1786.41)
Not Hispanic or Latino	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	192	5.00 (5.00, 5.00)	2936.50 (2534.07, 3402.83)	410.70 (354.42, 475.92)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	105	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	105	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	105	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	105	5.00 (5.00, 5.00)	5.05 (4.98, 5.12)	1.00 (1.00, 1.01)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	105	5.04 (4.98, 5.11)	5.04 (4.98, 5.10)	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 Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	197	0.05 (0.05, 0.05)	336.79 (228.62, 496.13)	470.78 (319.58, 693.52)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	197	0.80 (0.80, 0.80)	11481.92 (8121.74, 16232.31)	6702.23 (4740.82, 9475.12)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	197	0.15 (0.15, 0.15)	6982.30 (5351.20, 9110.58)	7771.93 (5956.37, 10140.89)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	197	5.00 (5.00, 5.00)	4559.26 (3833.09, 5423.00)	492.89 (414.39, 586.27)
Not Hispanic or Latino	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	197	5.00 (5.00, 5.00)	1096.59 (968.61, 1241.49)	153.37 (135.47, 173.63)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	24	0.05 (0.05, 0.05)	58.01 (26.79, 125.63)	81.09 (37.45, 175.60)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	24	0.80 (0.80, 0.80)	687.35 (401.67, 1176.23)	401.22 (234.46, 686.59)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	24	0.15 (0.15, 0.15)	368.94 (246.00, 553.31)	410.66 (273.82, 615.88)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	24	5.00 (5.00, 5.00)	265.43 (178.88, 393.84)	28.69 (19.34, 42.58)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	24	5.00 (5.00, 5.00)	47.26 (35.08, 63.67)	6.61 (4.91, 8.90)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	10	0.05 (0.05, 0.05)	161.25 (57.39, 453.07)	225.39 (80.22, 633.29)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10	0.80 (0.80, 0.80)	1011.94 (491.79, 2082.23)	590.69 (287.07, 1215.44)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10	0.15 (0.15, 0.15)	998.83 (440.25, 2266.09)	1111.78 (490.04, 2522.36)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	10	5.00 (5.00, 5.00)	603.35 (391.60, 929.61)	65.23 (42.33, 100.50)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	10	5.00 (5.00, 5.00)	164.94 (96.90, 280.75)	23.07 (13.55, 39.27)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	3	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	3	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	3	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	3	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	3	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)	150.91 (50.10, 454.56)	210.93 (70.03, 635.37)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)	933.13 (177.65, 4901.28)	544.68 (103.70, 2860.98)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)	919.26 (321.02, 2632.38)	1023.22 (357.33, 2930.07)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)	334.88 (189.66, 591.32)	36.20 (20.50, 63.93)
Not reported and unknown	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)	67.15 (53.10, 84.92)	9.39 (7.43, 11.88)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	24	0.05 (0.05, 0.05)	327.27 (119.82, 893.91)	457.45 (167.48, 1249.48)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	24	0.80 (0.80, 0.80)	22839.43 (14802.74, 35239.40)	13331.84 (8640.66, 20569.94)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	24	0.15 (0.15, 0.15)	8195.01 (4910.50, 13676.45)	9121.78 (5465.82, 15223.12)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	24	5.00 (5.00, 5.00)	5913.17 (4520.71, 7734.55)	639.26 (488.73, 836.17)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	24	5.00 (5.00, 5.00)	1240.74 (937.84, 1641.46)	173.53 (131.17, 229.57)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	10	0.05 (0.05, 0.05)	4301.54 (1357.36, 13631.78)	6012.57 (1897.28, 19054.10)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	10	0.80 (0.80, 0.80)	103890.10 (45002.03, 239837.02)	60642.73 (26268.59, 139997.67)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	10	0.15 (0.15, 0.15)	47404.36 (23207.03, 96831.58)	52765.32 (25831.51, 107782.25)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	10	5.00 (5.00, 5.00)	23215.17 (13671.51, 39420.96)	2509.75 (1478.00, 4261.73)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	10	5.00 (5.00, 5.00)	6233.53 (4031.44, 9638.47)	871.82 (563.84, 1348.04)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	3	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	3	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	3	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	3	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	3	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)	709.75 (60.37, 8344.97)	992.07 (84.38, 11664.36)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)	39619.41 (16493.33, 95171.68)	23126.64 (9627.49, 55553.62)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)	36731.43 (9467.26, 142511.95)	40885.39 (10537.92, 158628.62)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)	5283.65 (2596.92, 10750.03)	571.21 (280.75, 1162.17)
Not reported and unknown	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)	1032.69 (648.15, 1645.37)	144.43 (90.65, 230.12)

Table 8h. 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)	364	0.05 (0.05, 0.05)	41.06 (31.51, 53.49)	58.05 (44.79, 75.23)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	0.80 (0.80, 0.80)	444.62 (363.50, 543.85)	259.54 (212.18, 317.45)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	0.15 (0.15, 0.15)	290.68 (246.41, 342.91)	323.55 (274.27, 381.69)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	364	5.00 (5.00, 5.00)	255.72 (227.37, 287.61)	27.65 (24.58, 31.09)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	364	5.00 (5.00, 5.00)	57.60 (52.24, 63.50)	8.05 (7.31, 8.88)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	123	0.05 (0.05, 0.05)	53.76 (35.74, 80.87)	75.15 (49.96, 113.03)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	0.80 (0.80, 0.80)	703.12 (455.68, 1084.94)	410.43 (265.99, 633.30)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	0.15 (0.15, 0.15)	363.42 (262.18, 503.74)	404.52 (291.83, 560.71)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	123	5.00 (5.00, 5.00)	388.43 (322.77, 467.45)	41.99 (34.89, 50.53)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	123	5.00 (5.00, 5.00)	86.06 (72.97, 101.49)	11.99 (10.16, 14.16)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	64	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	64	5.00 (5.00, 5.00)	5.06 (4.98, 5.14)	1.00 (1.00, 1.00)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	64	5.00 (5.00, 5.00)	5.09 (4.96, 5.22)	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
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)	25.64 (18.01, 36.52)	35.67 (25.06, 50.75)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)	367.32 (265.15, 508.86)	214.41 (154.77, 297.03)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)	176.46 (130.58, 238.44)	196.41 (145.35, 265.41)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)	166.17 (141.73, 194.83)	17.96 (15.32, 21.06)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)	39.95 (34.43, 46.36)	5.39 (4.56, 6.37)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	364	0.05 (0.05, 0.05)	429.31 (325.12, 566.88)	597.92 (451.94, 791.04)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	0.80 (0.80, 0.80)	15339.37 (12072.43, 19490.37)	8953.90 (7046.92, 11376.92)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	0.15 (0.15, 0.15)	8451.21 (6898.39, 10353.56)	9406.95 (7678.53, 11524.44)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	364	5.00 (5.00, 5.00)	5748.65 (5201.26, 6353.65)	621.48 (562.30, 686.88)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	364	5.00 (5.00, 5.00)	1336.93 (1209.59, 1477.67)	186.98 (169.17, 206.67)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	123	0.05 (0.05, 0.05)	776.96 (446.42, 1352.24)	1086.01 (623.99, 1890.13)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	0.80 (0.80, 0.80)	29727.42 (21038.85, 42004.17)	17352.49 (12280.80, 24518.68)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	0.15 (0.15, 0.15)	24717.56 (17094.43, 35740.18)	27512.87 (19027.63, 39782.03)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	123	5.00 (5.00, 5.00)	12924.84 (10755.64, 15531.53)	1397.28 (1162.77, 1679.08)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	123	5.00 (5.00, 5.00)	2779.22 (2303.45, 3353.26)	388.70 (322.16, 468.99)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	64	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	64	5.00 (5.00, 5.00)	5.05 (4.95, 5.14)	1.01 (1.00, 1.02)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	64	5.00 (5.00, 5.00)	5.03 (4.97, 5.10)	1.00 (1.00, 1.00)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)	317.61 (216.44, 466.09)	443.95 (302.53, 651.48)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)	10278.20 (6874.74, 15366.60)	5999.59 (4012.92, 8969.79)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)	7342.45 (5384.54, 10012.29)	8172.81 (5993.48, 11144.58)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)	4559.48 (3711.18, 5601.69)	492.92 (401.21, 605.59)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)	1141.78 (996.05, 1308.83)	159.69 (139.31, 183.05)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	177	0.05 (0.05, 0.05)	49.86 (35.23, 70.57)	69.41 (48.88, 98.56)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	177	0.80 (0.80, 0.80)	576.32 (414.65, 801.02)	336.41 (242.04, 467.57)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	177	0.15 (0.15, 0.15)	358.25 (279.91, 458.51)	398.77 (311.57, 510.37)
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	177	5.00 (5.00, 5.00)	271.52 (228.80, 322.22)	29.35 (24.73, 34.83)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Black or African American	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	177	5.00 (5.00, 5.00)	59.84 (50.41, 71.03)	8.36 (7.03, 9.93)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	47	0.05 (0.05, 0.05)	53.32 (27.21, 104.50)	74.53 (38.03, 146.07)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	47	0.80 (0.80, 0.80)	624.63 (357.81, 1090.43)	364.61 (208.86, 636.50)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	47	0.15 (0.15, 0.15)	313.05 (198.01, 494.94)	348.46 (220.40, 550.91)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	47	5.00 (5.00, 5.00)	364.34 (269.52, 492.53)	39.39 (29.14, 53.25)
Black or African American	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	47	5.00 (5.00, 5.00)	98.58 (79.50, 122.23)	13.69 (10.98, 17.05)
Black or African American	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Black or African American	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Black or African American	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Black or African American	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Black or African American	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	30	5.23 (4.90, 5.59)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Black or African American	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	43	0.05 (0.05, 0.05)	34.73 (14.02, 86.02)	48.86 (19.75, 120.88)

(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	Positive	Anti RBD IgG (IU/ml)	43	0.80 (0.80, 0.80)	226.82 (99.31, 518.04)	126.43 (51.97, 307.60)
Black or African American	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	43	0.15 (0.15, 0.15)	199.48 (116.80, 340.67)	222.04 (130.01, 379.20)
Black or African American	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	43	5.00 (5.00, 5.00)	176.31 (117.12, 265.43)	19.06 (12.66, 28.69)
Black or African American	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	43	5.00 (5.00, 5.00)	43.50 (32.59, 58.08)	5.75 (4.06, 8.14)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	177	0.05 (0.05, 0.05)	456.49 (283.36, 735.41)	638.07 (396.07, 1027.94)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	177	0.80 (0.80, 0.80)	16464.79 (11343.20, 23898.84)	9610.83 (6621.25, 13950.23)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	177	0.15 (0.15, 0.15)	9659.07 (6920.83, 13480.70)	10751.41 (7703.50, 15005.23)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	177	5.00 (5.00, 5.00)	5795.41 (4882.53, 6878.96)	626.53 (527.84, 743.67)
Black or African American	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	177	5.00 (5.00, 5.00)	1264.62 (1095.27, 1460.15)	176.87 (153.18, 204.22)
Black or African American	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	47	0.05 (0.05, 0.05)	923.52 (437.06, 1951.41)	1290.87 (610.91, 2727.62)
Black or African American	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	47	0.80 (0.80, 0.80)	28773.41 (14938.07, 55422.75)	16795.62 (8719.65, 32351.37)
Black or African American	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	47	0.15 (0.15, 0.15)	21563.62 (12668.88, 36703.28)	24002.25 (14101.61, 40854.05)

(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	Pseudovirus-nAb ID50	47	5.00 (5.00, 5.00)	17910.84 (13137.44, 24418.63)	1936.31 (1420.26, 2639.85)
Black or African American	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	47	5.00 (5.00, 5.00)	3160.64 (2457.43, 4065.08)	442.05 (343.70, 568.54)
Black or African American	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Black or African American	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Black or African American	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Black or African American	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)	5.07 (4.93, 5.22)	1.00 (1.00, 1.00)
Black or African American	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	30	5.23 (4.90, 5.59)	5.10 (4.90, 5.31)	1.00 (1.00, 1.00)
Black or African American	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	43	0.05 (0.05, 0.05)	265.27 (102.59, 685.91)	370.78 (143.39, 958.75)
Black or African American	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	43	0.80 (0.80, 0.80)	11939.56 (4534.72, 31435.89)	6969.36 (2647.01, 18349.76)
Black or African American	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	43	0.15 (0.15, 0.15)	7387.02 (3806.79, 14334.40)	8222.42 (4237.30, 15955.47)
Black or African American	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	43	5.00 (5.00, 5.00)	3988.84 (2831.11, 5620.00)	431.23 (306.07, 607.57)
Black or African American	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	43	5.00 (5.00, 5.00)	759.94 (565.62, 1021.01)	106.29 (79.11, 142.80)

(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	Negative	Anti N IgG (IU/ml)	72	0.05 (0.05, 0.05)	37.82 (21.68, 66.00)	52.34 (29.73, 92.14)
Asian	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	0.80 (0.80, 0.80)	475.22 (319.69, 706.40)	277.39 (186.61, 412.34)
Asian	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	0.15 (0.15, 0.15)	262.54 (163.56, 421.43)	292.23 (182.06, 469.09)
Asian	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	72	5.00 (5.00, 5.00)	232.55 (174.73, 309.51)	25.02 (18.77, 33.34)
Asian	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	72	5.00 (5.00, 5.00)	52.65 (38.88, 71.30)	7.28 (5.35, 9.91)
Asian	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	15	0.05 (0.05, 0.05)	294.07 (155.55, 555.91)	411.04 (217.43, 777.04)
Asian	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	15	0.80 (0.80, 0.80)	2620.67 (906.74, 7574.34)	1529.74 (529.28, 4421.30)
Asian	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	15	0.15 (0.15, 0.15)	1190.35 (747.09, 1896.61)	1324.97 (831.58, 2111.10)
Asian	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	15	5.00 (5.00, 5.00)	655.99 (503.43, 854.77)	70.92 (54.43, 92.41)
Asian	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	15	5.00 (5.00, 5.00)	127.56 (102.04, 159.45)	17.84 (14.27, 22.30)
Asian	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	11	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Asian	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	11	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Asian	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	11	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Asian	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	11	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Asian	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	11	5.00 (5.00, 5.00)	5.17 (4.83, 5.54)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Asian	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	22	0.05 (0.05, 0.05)	44.02 (14.95, 129.57)	60.94 (20.63, 180.03)
Asian	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	22	0.80 (0.80, 0.80)	659.00 (267.31, 1624.62)	384.67 (156.04, 948.33)
Asian	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	22	0.15 (0.15, 0.15)	144.30 (62.05, 335.58)	160.61 (69.06, 373.53)
Asian	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	22	5.00 (5.00, 5.00)	204.47 (132.07, 316.57)	22.11 (14.28, 34.22)
Asian	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	22	5.00 (5.00, 5.00)	41.09 (26.66, 63.32)	5.46 (3.32, 9.00)
Asian	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	72	0.05 (0.05, 0.05)	315.02 (139.54, 711.20)	440.33 (195.04, 994.09)
Asian	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	72	0.80 (0.80, 0.80)	12012.43 (6907.26, 20890.86)	7011.90 (4031.91, 12194.41)
Asian	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	72	0.15 (0.15, 0.15)	9468.91 (5592.69, 16031.67)	10539.74 (6225.17, 17844.69)
Asian	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	72	5.00 (5.00, 5.00)	5818.15 (4505.18, 7513.77)	628.99 (487.05, 812.30)
Asian	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	72	5.00 (5.00, 5.00)	1397.40 (1082.23, 1804.36)	195.44 (151.36, 252.36)
Asian	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	15	0.05 (0.05, 0.05)	2569.60 (1353.75, 4877.47)	3591.72 (1892.23, 6817.59)
Asian	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	15	0.80 (0.80, 0.80)	49794.64 (32920.63, 75317.70)	29066.13 (19216.43, 43964.45)
Asian	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	15	0.15 (0.15, 0.15)	48882.24 (30100.12, 79384.18)	54410.33 (33504.14, 88361.74)
Asian	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	15	5.00 (5.00, 5.00)	20828.51 (15997.92, 27117.72)	2251.73 (1729.50, 2931.65)
Asian	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	15	5.00 (5.00, 5.00)	4595.85 (3092.64, 6829.73)	642.78 (432.54, 955.21)

(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)	11	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Asian	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	11	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Asian	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	11	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Asian	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	11	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Asian	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	11	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Asian	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	22	0.05 (0.05, 0.05)	389.72 (88.61, 1713.97)	545.04 (123.96, 2396.43)
Asian	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	22	0.80 (0.80, 0.80)	10808.40 (3236.81, 36091.52)	6309.08 (1889.39, 21067.34)
Asian	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	22	0.15 (0.15, 0.15)	4860.65 (1861.04, 12695.03)	5410.35 (2071.50, 14130.71)
Asian	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	22	5.00 (5.00, 5.00)	5318.60 (3104.46, 9111.90)	574.98 (335.62, 985.07)
Asian	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	22	5.00 (5.00, 5.00)	1310.44 (837.82, 2049.68)	183.28 (117.18, 286.67)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	23	0.05 (0.05, 0.05)	93.57 (44.17, 198.23)	130.80 (61.74, 277.08)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	0.80 (0.80, 0.80)	762.61 (273.77, 2124.33)	445.15 (159.80, 1240.01)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	0.15 (0.15, 0.15)	462.07 (240.29, 888.54)	514.32 (267.46, 989.02)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	23	5.00 (5.00, 5.00)	363.91 (239.83, 552.19)	39.34 (25.93, 59.70)

(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	Negative	Pseudovirus-nAb ID80	23	5.00 (5.00, 5.00)	89.99 (54.50, 148.58)	12.59 (7.62, 20.78)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	8	0.05 (0.05, 0.05)	140.81 (65.82, 301.25)	196.83 (92.00, 421.08)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	8	0.80 (0.80, 0.80)	2938.82 (1232.89, 7005.20)	1715.45 (719.66, 4089.08)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	8	0.15 (0.15, 0.15)	2391.07 (852.07, 6709.78)	2661.48 (948.43, 7468.59)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	8	5.00 (5.00, 5.00)	615.20 (422.79, 895.18)	66.51 (45.71, 96.78)
American Indian or Alaska Native	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	8	5.00 (5.00, 5.00)	108.79 (73.51, 161.00)	15.22 (10.28, 22.52)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	10	0.05 (0.05, 0.05)	102.22 (64.50, 162.00)	142.88 (90.16, 226.44)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	10	0.80 (0.80, 0.80)	758.10 (453.73, 1266.65)	442.52 (264.85, 739.37)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	10	0.15 (0.15, 0.15)	443.10 (304.99, 643.75)	493.21 (339.48, 716.55)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	10	5.00 (5.00, 5.00)	328.46 (256.87, 420.01)	35.51 (27.77, 45.41)
American Indian or Alaska Native	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	10	5.00 (5.00, 5.00)	62.76 (44.40, 88.70)	8.78 (6.21, 12.41)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	23	0.05 (0.05, 0.05)	1173.21 (261.14, 5270.72)	1639.87 (365.02, 7367.25)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	23	0.80 (0.80, 0.80)	24391.43 (10080.85, 59017.01)	14237.77 (5884.40, 34449.41)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	23	0.15 (0.15, 0.15)	14954.48 (6972.53, 32073.94)	16645.68 (7761.05, 35701.18)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	23	5.00 (5.00, 5.00)	6254.79 (4231.93, 9244.59)	676.19 (457.51, 999.41)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	23	5.00 (5.00, 5.00)	1953.83 (1315.57, 2901.76)	273.26 (184.00, 405.84)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	8	0.05 (0.05, 0.05)	10072.81 (4432.96, 22887.98)	14079.48 (6196.26, 31992.15)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	8	0.80 (0.80, 0.80)	219326.14 (121140.13, 397093.47)	128025.06 (70711.92, 231791.42)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	8	0.15 (0.15, 0.15)	38169.31 (14749.81, 98773.91)	42485.88 (16417.87, 109944.25)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	8	5.00 (5.00, 5.00)	22806.33 (13916.72, 37374.35)	2465.55 (1504.51, 4040.47)
American Indian or Alaska Native	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	8	5.00 (5.00, 5.00)	5321.00 (2135.17, 13260.30)	744.20 (298.63, 1854.59)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	10	0.05 (0.05, 0.05)	663.76 (286.34, 1538.66)	927.78 (400.23, 2150.69)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	10	0.80 (0.80, 0.80)	13191.00 (3827.99, 45455.25)	7699.85 (2234.48, 26533.14)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	10	0.15 (0.15, 0.15)	26029.14 (16504.54, 41050.31)	28972.78 (18371.03, 45692.68)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	10	5.00 (5.00, 5.00)	4660.02 (3155.48, 6881.93)	503.79 (341.13, 743.99)
American Indian or Alaska Native	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	10	5.00 (5.00, 5.00)	1347.30 (880.76, 2060.96)	188.43 (123.18, 288.25)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	9	0.05 (0.05, 0.05)	99.87 (61.12, 163.19)	139.59 (85.43, 228.11)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	9	0.80 (0.80, 0.80)	426.51 (255.81, 711.15)	248.97 (149.32, 415.11)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	9	0.15 (0.15, 0.15)	380.07 (276.92, 521.65)	423.05 (308.23, 580.64)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	9	5.00 (5.00, 5.00)	331.39 (276.43, 397.27)	35.83 (29.88, 42.95)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	9	5.00 (5.00, 5.00)	62.78 (49.85, 79.05)	8.78 (6.97, 11.06)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)	226.29 (88.46, 578.83)	316.30 (123.65, 809.08)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)	914.11 (581.80, 1436.23)	533.59 (339.61, 838.36)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)	1737.86 (569.11, 5306.85)	1934.39 (633.47, 5907.00)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)	701.01 (553.07, 888.52)	75.78 (59.79, 96.06)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)	275.54 (162.06, 468.49)	38.54 (22.67, 65.52)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	1	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	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	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	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	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	1	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	1	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)	27.26 (7.93, 93.72)	38.11 (11.08, 131.00)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)	252.40 (62.65, 1016.84)	147.33 (36.57, 593.55)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)	218.75 (78.82, 607.12)	243.49 (87.73, 675.78)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)	211.27 (153.18, 291.38)	22.84 (16.56, 31.50)
Native Hawaiian or Other Pacific Islander	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)	44.16 (24.09, 80.94)	6.18 (3.37, 11.32)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	9	0.05 (0.05, 0.05)	356.71 (64.07, 1986.10)	498.60 (89.55, 2776.11)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	9	0.80 (0.80, 0.80)	13246.47 (6274.44, 27965.66)	7732.23 (3662.52, 16324.11)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	9	0.15 (0.15, 0.15)	8165.52 (2859.04, 23321.02)	9088.96 (3182.37, 25958.39)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	9	5.00 (5.00, 5.00)	9064.60 (6636.76, 12380.60)	979.96 (717.49, 1338.44)

(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	Pseudovirus-nAb ID80	9	5.00 (5.00, 5.00)	2156.85 (1616.92, 2877.08)	301.66 (226.14, 402.39)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)	6042.10 (2022.73, 18048.40)	8445.47 (2827.31, 25227.52)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)	74054.95 (33738.41, 162548.74)	43227.36 (19693.78, 94882.96)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)	101850.63 (47782.62, 217098.82)	113368.91 (53186.35, 241650.52)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)	27972.03 (20753.71, 37700.94)	3024.00 (2243.64, 4075.78)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)	6157.46 (3558.81, 10653.66)	861.18 (497.74, 1490.02)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	1	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	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	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	1	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	1	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)	432.15 (37.94, 4922.31)	604.04 (53.03, 6880.26)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)	38088.52 (9838.22, 147459.16)	22233.03 (5742.77, 86074.87)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)	4427.51 (2207.15, 8881.52)	4928.22 (2456.76, 9885.93)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)	4113.03 (2238.68, 7556.69)	444.65 (242.02, 816.94)
Native Hawaiian or Other Pacific Islander	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)	1174.47 (501.00, 2753.23)	164.26 (70.07, 385.07)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	49	0.05 (0.05, 0.05)	29.45 (12.69, 68.38)	44.41 (20.72, 95.16)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	49	0.80 (0.80, 0.80)	410.51 (186.54, 903.38)	239.62 (108.89, 527.32)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	49	0.15 (0.15, 0.15)	278.28 (158.14, 489.70)	309.75 (176.02, 545.08)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	49	5.00 (5.00, 5.00)	205.17 (141.25, 298.02)	22.18 (15.27, 32.22)
Multiracial	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	49	5.00 (5.00, 5.00)	57.57 (38.68, 85.69)	7.91 (5.27, 11.87)
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	16	0.05 (0.05, 0.05)	68.05 (31.63, 146.42)	95.12 (44.21, 204.67)
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	16	0.80 (0.80, 0.80)	971.93 (330.52, 2858.07)	567.34 (192.93, 1668.31)
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	16	0.15 (0.15, 0.15)	532.91 (268.62, 1057.20)	593.17 (299.00, 1176.76)
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	16	5.00 (5.00, 5.00)	473.52 (309.87, 723.59)	51.19 (33.50, 78.23)
Multiracial	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	16	5.00 (5.00, 5.00)	126.56 (85.26, 187.85)	17.70 (11.92, 26.27)

(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)	6	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Multiracial	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	6	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Multiracial	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	6	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Multiracial	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	6	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Multiracial	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	6	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	12	0.05 (0.05, 0.05)	31.59 (18.74, 53.25)	44.06 (26.09, 74.41)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	12	0.80 (0.80, 0.80)	314.25 (165.30, 597.40)	183.43 (96.49, 348.71)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	12	0.15 (0.15, 0.15)	83.65 (37.43, 186.90)	93.10 (41.67, 208.04)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	12	5.00 (5.00, 5.00)	178.36 (142.47, 223.30)	19.28 (15.40, 24.14)
Multiracial	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	12	5.00 (5.00, 5.00)	37.74 (22.93, 62.11)	5.28 (3.21, 8.69)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	49	0.05 (0.05, 0.05)	395.17 (132.13, 1181.86)	552.36 (184.69, 1651.97)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	49	0.80 (0.80, 0.80)	16815.75 (7965.95, 35497.30)	9815.69 (4649.88, 20720.49)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	49	0.15 (0.15, 0.15)	8340.71 (4538.01, 15329.94)	9283.96 (5051.21, 17063.60)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	49	5.00 (5.00, 5.00)	6257.61 (4376.11, 8948.07)	676.50 (473.09, 967.36)
Multiracial	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	49	5.00 (5.00, 5.00)	1143.71 (824.93, 1585.69)	159.96 (115.37, 221.77)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	16	0.05 (0.05, 0.05)	1464.47 (408.74, 5246.97)	2009.84 (552.91, 7305.74)
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	16	0.80 (0.80, 0.80)	50139.82 (17535.13, 143369.44)	29267.62 (10235.61, 83687.61)
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	16	0.15 (0.15, 0.15)	25459.67 (10716.55, 60485.41)	28338.90 (11928.48, 67325.70)
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	16	5.00 (5.00, 5.00)	14308.15 (9255.43, 22119.25)	1546.83 (1000.59, 2391.27)
Multiracial	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	16	5.00 (5.00, 5.00)	2633.58 (1762.06, 3936.14)	368.33 (246.44, 550.51)
Multiracial	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	6	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Multiracial	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	6	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Multiracial	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	6	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Multiracial	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	6	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Multiracial	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	6	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Multiracial	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	12	0.05 (0.05, 0.05)	548.21 (57.84, 5195.84)	766.28 (80.85, 7262.59)
Multiracial	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	12	0.80 (0.80, 0.80)	7909.85 (4369.39, 14319.10)	4617.14 (2550.50, 8358.35)
Multiracial	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	12	0.15 (0.15, 0.15)	4598.09 (2193.33, 9639.44)	5118.09 (2441.37, 10729.56)
Multiracial	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	12	5.00 (5.00, 5.00)	3160.71 (1633.71, 6114.95)	341.70 (176.62, 661.08)
Multiracial	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	12	5.00 (5.00, 5.00)	745.11 (497.59, 1115.75)	104.21 (69.59, 156.05)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Other	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	26	0.05 (0.05, 0.05)	43.50 (17.39, 108.82)	60.80 (24.31, 152.10)
Other	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	0.80 (0.80, 0.80)	399.49 (167.27, 954.06)	233.19 (97.64, 556.91)
Other	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	0.15 (0.15, 0.15)	318.92 (166.57, 610.62)	354.99 (185.41, 679.67)
Other	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	26	5.00 (5.00, 5.00)	271.65 (178.35, 413.75)	29.37 (19.28, 44.73)
Other	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	26	5.00 (5.00, 5.00)	57.67 (34.42, 96.63)	8.07 (4.81, 13.52)
Other	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)	167.97 (47.36, 595.71)	234.79 (66.20, 832.66)
Other	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)	1250.64 (645.49, 2423.11)	730.02 (376.79, 1414.42)
Other	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)	576.70 (296.35, 1122.25)	641.91 (329.86, 1249.16)
Other	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)	555.57 (345.65, 892.95)	60.06 (37.37, 96.54)
Other	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)	171.34 (101.55, 289.08)	23.96 (14.20, 40.43)
Other	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Other	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	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
Other	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	7	0.05 (0.05, 0.05)	65.66 (6.82, 632.49)	91.77 (9.53, 884.07)
Other	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	7	0.80 (0.80, 0.80)	536.53 (117.15, 2457.11)	313.18 (68.39, 1434.26)
Other	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	7	0.15 (0.15, 0.15)	143.17 (79.74, 257.05)	159.36 (88.76, 286.12)
Other	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	7	5.00 (5.00, 5.00)	206.55 (78.40, 544.17)	22.33 (8.48, 58.83)
Other	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	7	5.00 (5.00, 5.00)	30.45 (12.86, 72.10)	3.84 (1.45, 10.19)
Other	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	26	0.05 (0.05, 0.05)	766.05 (206.69, 2839.14)	1070.76 (288.91, 3968.47)
Other	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	26	0.80 (0.80, 0.80)	16598.89 (7152.47, 38521.43)	9689.11 (4175.04, 22485.73)
Other	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	26	0.15 (0.15, 0.15)	9766.16 (4337.03, 21991.52)	10870.62 (4827.51, 24478.54)
Other	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	26	5.00 (5.00, 5.00)	5155.98 (2770.78, 9594.45)	557.40 (299.54, 1037.24)
Other	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	26	5.00 (5.00, 5.00)	1143.47 (843.72, 1549.72)	159.93 (118.00, 216.74)
Other	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)	5967.69 (1293.08, 27541.48)	8341.46 (1807.43, 38496.66)
Other	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)	93702.20 (39786.69, 220679.37)	54695.85 (23224.29, 128814.98)
Other	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)	52255.49 (28647.36, 95318.96)	58165.06 (31887.09, 106098.58)
Other	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)	44169.24 (23062.37, 84593.29)	4775.05 (2493.23, 9145.22)
Other	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)	3465.64 (2291.99, 5240.27)	484.70 (320.56, 732.90)

(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	Placebo	Negative	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Other	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	7	0.05 (0.05, 0.05)	584.51 (42.27, 8082.47)	817.00 (59.08, 11297.44)
Other	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	7	0.80 (0.80, 0.80)	6186.73 (2340.40, 16354.28)	3611.32 (1366.14, 9546.32)
Other	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	7	0.15 (0.15, 0.15)	11067.44 (3446.37, 35541.21)	12319.05 (3836.12, 39560.57)
Other	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	7	5.00 (5.00, 5.00)	4673.65 (1268.25, 17222.90)	505.26 (137.11, 1861.93)
Other	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	7	5.00 (5.00, 5.00)	721.89 (301.72, 1727.19)	100.96 (42.20, 241.56)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)	65.58 (5.93, 724.97)	91.67 (8.29, 1013.34)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)	498.76 (93.21, 2668.88)	291.14 (54.41, 1557.88)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)	458.96 (91.81, 2294.37)	510.87 (102.19, 2553.84)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)	243.46 (96.65, 613.24)	26.32 (10.45, 66.30)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)	79.18 (44.71, 140.24)	11.07 (6.25, 19.61)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)	90.05 (15.63, 519.03)	125.88 (21.84, 725.48)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)	2508.31 (744.73, 8448.19)	1464.15 (434.71, 4931.38)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)	684.69 (161.32, 2906.01)	762.13 (179.57, 3234.65)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)	651.90 (287.13, 1480.08)	70.48 (31.04, 160.01)
Not reported and unknown	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)	117.60 (56.06, 246.68)	16.45 (7.84, 34.50)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	1	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	1	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Not reported and unknown	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	1	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	5	0.05 (0.05, 0.05)	800.56 (87.46, 7327.65)	1119.00 (122.25, 10242.37)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	5	0.80 (0.80, 0.80)	12804.63 (1405.77, 116632.70)	7474.32 (820.57, 68080.84)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	5	0.15 (0.15, 0.15)	18889.81 (2570.49, 138816.11)	21026.06 (2861.18, 154514.81)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	5	5.00 (5.00, 5.00)	9832.63 (4912.05, 19682.33)	1062.99 (531.03, 2127.82)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	5	5.00 (5.00, 5.00)	1054.61 (469.14, 2370.72)	147.50 (65.61, 331.57)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	4	0.05 (0.05, 0.05)	5633.11 (824.49, 38486.54)	7873.79 (1152.45, 53795.36)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	4	0.80 (0.80, 0.80)	101127.66 (20013.89, 510985.15)	59030.24 (11682.51, 298272.27)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	4	0.15 (0.15, 0.15)	39070.40 (7675.07, 198890.31)	43488.87 (8543.04, 221382.80)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	4	5.00 (5.00, 5.00)	12510.05 (7231.84, 21640.61)	1352.44 (781.82, 2339.53)
Not reported and unknown	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	4	5.00 (5.00, 5.00)	3345.35 (1385.85, 8075.44)	467.88 (193.83, 1129.43)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	1	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	1	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	1	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	1	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Not reported and unknown	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	1	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)

Table 8i. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Communities of color

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Communities of color								
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	392	0.05 (0.05, 0.05)	47.26 (36.70, 60.86)	66.76 (52.01, 85.69)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	392	0.80 (0.80, 0.80)	525.41 (419.74, 657.70)	306.69 (245.01, 383.91)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	392	0.15 (0.15, 0.15)	330.77 (274.54, 398.51)	368.17 (305.58, 443.58)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	392	5.00 (5.00, 5.00)	262.44 (232.16, 296.66)	28.33 (25.05, 32.03)
Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	392	5.00 (5.00, 5.00)	60.92 (53.65, 69.18)	8.48 (7.46, 9.64)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	108	0.05 (0.05, 0.05)	83.38 (55.09, 126.19)	116.55 (77.01, 176.38)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	108	0.80 (0.80, 0.80)	1009.14 (666.67, 1527.55)	589.06 (389.15, 891.66)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	108	0.15 (0.15, 0.15)	516.48 (374.80, 711.70)	574.88 (417.19, 792.19)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	108	5.00 (5.00, 5.00)	457.67 (379.69, 551.66)	49.48 (41.05, 59.64)
Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	108	5.00 (5.00, 5.00)	112.88 (96.81, 131.60)	15.74 (13.48, 18.37)
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	60	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	60	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	60	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	60	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	60	5.09 (4.96, 5.22)	5.04 (4.96, 5.12)	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
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	106	0.05 (0.05, 0.05)	42.97 (25.86, 71.39)	60.04 (36.13, 99.78)
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	106	0.80 (0.80, 0.80)	402.72 (257.62, 629.53)	231.37 (145.70, 367.43)
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	106	0.15 (0.15, 0.15)	173.85 (125.33, 241.16)	193.51 (139.50, 268.43)
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	106	5.00 (5.00, 5.00)	199.57 (160.88, 247.56)	21.57 (17.39, 26.76)
Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	106	5.00 (5.00, 5.00)	41.31 (33.87, 50.39)	5.53 (4.41, 6.93)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	392	0.05 (0.05, 0.05)	461.29 (324.93, 654.86)	643.93 (453.52, 914.29)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	392	0.80 (0.80, 0.80)	15770.77 (12329.03, 20173.30)	9205.71 (7196.70, 11775.56)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	392	0.15 (0.15, 0.15)	9980.31 (8002.73, 12446.57)	11108.98 (8907.76, 13854.15)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	392	5.00 (5.00, 5.00)	5929.17 (5260.13, 6683.31)	640.99 (568.66, 722.52)
Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	392	5.00 (5.00, 5.00)	1341.33 (1206.32, 1491.45)	187.60 (168.72, 208.59)
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	108	0.05 (0.05, 0.05)	1605.20 (984.07, 2618.40)	2235.54 (1368.67, 3651.46)
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	108	0.80 (0.80, 0.80)	44982.36 (30010.58, 67423.30)	26257.10 (17517.78, 39356.33)
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	108	0.15 (0.15, 0.15)	27857.30 (19962.25, 38874.83)	31007.68 (22219.77, 43271.18)
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	108	5.00 (5.00, 5.00)	18324.42 (15234.23, 22041.44)	1981.02 (1646.94, 2382.86)
Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	108	5.00 (5.00, 5.00)	3385.04 (2840.22, 4034.36)	473.43 (397.23, 564.25)

(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	Negative	Anti N IgG (IU/ml)	60	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	60	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	60	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Communities of Color	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	60	5.00 (5.00, 5.00)	5.03 (4.97, 5.09)	1.00 (1.00, 1.00)
Communities of Color	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	60	5.09 (4.96, 5.22)	5.04 (4.96, 5.12)	1.00 (1.00, 1.00)
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	106	0.05 (0.05, 0.05)	388.64 (200.06, 754.96)	543.30 (279.69, 1055.37)
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	106	0.80 (0.80, 0.80)	11484.07 (6968.52, 18925.69)	6703.48 (4067.66, 11047.30)
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	106	0.15 (0.15, 0.15)	7070.15 (4740.81, 10543.98)	7869.71 (5276.95, 11736.39)
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	106	5.00 (5.00, 5.00)	4366.87 (3382.69, 5637.40)	472.09 (365.70, 609.45)
Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	106	5.00 (5.00, 5.00)	965.69 (778.11, 1198.49)	135.06 (108.83, 167.62)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	364	0.05 (0.05, 0.05)	41.06 (31.51, 53.49)	58.05 (44.79, 75.23)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	0.80 (0.80, 0.80)	444.62 (363.50, 543.85)	259.54 (212.18, 317.45)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	0.15 (0.15, 0.15)	290.68 (246.41, 342.91)	323.55 (274.27, 381.69)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	364	5.00 (5.00, 5.00)	255.72 (227.37, 287.61)	27.65 (24.58, 31.09)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	364	5.00 (5.00, 5.00)	57.60 (52.24, 63.50)	8.05 (7.31, 8.88)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	123	0.05 (0.05, 0.05)	53.76 (35.74, 80.87)	75.15 (49.96, 113.03)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	0.80 (0.80, 0.80)	703.12 (455.68, 1084.94)	410.43 (265.99, 633.30)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	0.15 (0.15, 0.15)	363.42 (262.18, 503.74)	404.52 (291.83, 560.71)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	123	5.00 (5.00, 5.00)	388.43 (322.77, 467.45)	41.99 (34.89, 50.53)
White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	123	5.00 (5.00, 5.00)	86.06 (72.97, 101.49)	11.99 (10.16, 14.16)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	64	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	64	5.00 (5.00, 5.00)	5.06 (4.98, 5.14)	1.00 (1.00, 1.00)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	64	5.00 (5.00, 5.00)	5.09 (4.96, 5.22)	1.01 (0.99, 1.03)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)	25.64 (18.01, 36.52)	35.67 (25.06, 50.75)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)	367.32 (265.15, 508.86)	214.41 (154.77, 297.03)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)	176.46 (130.58, 238.44)	196.41 (145.35, 265.41)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)	166.17 (141.73, 194.83)	17.96 (15.32, 21.06)
White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)	39.95 (34.43, 46.36)	5.39 (4.56, 6.37)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	364	0.05 (0.05, 0.05)	429.31 (325.12, 566.88)	597.92 (451.94, 791.04)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	364	0.80 (0.80, 0.80)	15339.37 (12072.43, 19490.37)	8953.90 (7046.92, 11376.92)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	364	0.15 (0.15, 0.15)	8451.21 (6898.39, 10353.56)	9406.95 (7678.53, 11524.44)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	364	5.00 (5.00, 5.00)	5748.65 (5201.26, 6353.65)	621.48 (562.30, 686.88)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	364	5.00 (5.00, 5.00)	1336.93 (1209.59, 1477.67)	186.98 (169.17, 206.67)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	123	0.05 (0.05, 0.05)	776.96 (446.42, 1352.24)	1086.01 (623.99, 1890.13)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	123	0.80 (0.80, 0.80)	29727.42 (21038.85, 42004.17)	17352.49 (12280.80, 24518.68)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	123	0.15 (0.15, 0.15)	24717.56 (17094.43, 35740.18)	27512.87 (19027.63, 39782.03)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	123	5.00 (5.00, 5.00)	12924.84 (10755.64, 15531.53)	1397.28 (1162.77, 1679.08)
White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	123	5.00 (5.00, 5.00)	2779.22 (2303.45, 3353.26)	388.70 (322.16, 468.99)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	64	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	64	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	64	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	64	5.00 (5.00, 5.00)	5.05 (4.95, 5.14)	1.01 (1.00, 1.02)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	64	5.00 (5.00, 5.00)	5.03 (4.97, 5.10)	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
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	122	0.05 (0.05, 0.05)	317.61 (216.44, 466.09)	443.95 (302.53, 651.48)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	122	0.80 (0.80, 0.80)	10278.20 (6874.74, 15366.60)	5999.59 (4012.92, 8969.79)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	122	0.15 (0.15, 0.15)	7342.45 (5384.54, 10012.29)	8172.81 (5993.48, 11144.58)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	122	5.00 (5.00, 5.00)	4559.48 (3711.18, 5601.69)	492.92 (401.21, 605.59)
White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	122	5.00 (5.00, 5.00)	1141.78 (996.05, 1308.83)	159.69 (139.31, 183.05)

Table 8j. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Communities of color

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age, Communities of color								
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	176	0.05 (0.05, 0.05)	35.93 (26.31, 49.07)	51.00 (37.51, 69.33)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	176	0.80 (0.80, 0.80)	394.71 (299.00, 521.05)	230.40 (174.53, 304.15)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	176	0.15 (0.15, 0.15)	250.74 (199.69, 314.85)	279.10 (222.27, 350.46)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	176	5.00 (5.00, 5.00)	230.32 (197.99, 267.94)	24.85 (21.35, 28.92)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	176	5.00 (5.00, 5.00)	55.93 (47.71, 65.57)	7.78 (6.62, 9.13)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	60	0.05 (0.05, 0.05)	72.97 (44.04, 120.89)	101.99 (61.56, 168.97)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	0.80 (0.80, 0.80)	829.16 (497.65, 1381.50)	484.00 (290.49, 806.41)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	0.15 (0.15, 0.15)	411.51 (278.82, 607.34)	458.05 (310.35, 676.02)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	60	5.00 (5.00, 5.00)	423.18 (337.53, 530.56)	45.75 (36.49, 57.36)
Age < 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	60	5.00 (5.00, 5.00)	108.01 (89.95, 129.69)	15.05 (12.51, 18.10)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	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 RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	30	5.07 (4.93, 5.22)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)	37.23 (20.24, 68.47)	52.03 (28.29, 95.72)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)	337.13 (196.52, 578.35)	193.04 (110.37, 337.64)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)	133.26 (90.86, 195.46)	148.33 (101.13, 217.56)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)	184.45 (142.49, 238.75)	19.94 (15.40, 25.81)
Age < 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	61	5.00 (5.00, 5.00)	39.57 (31.22, 50.16)	5.24 (3.99, 6.87)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	176	0.05 (0.05, 0.05)	327.10 (211.80, 505.16)	456.44 (295.49, 705.06)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	176	0.80 (0.80, 0.80)	11007.46 (8141.89, 14881.58)	6425.28 (4752.59, 8686.68)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	176	0.15 (0.15, 0.15)	6875.61 (5233.30, 9033.30)	7653.17 (5825.13, 10054.87)

(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	Pseudovirus-nAb ID50	176	5.00 (5.00, 5.00)	5288.72 (4552.91, 6143.43)	571.75 (492.21, 664.15)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	176	5.00 (5.00, 5.00)	1264.87 (1107.90, 1444.09)	176.91 (154.95, 201.97)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	60	0.05 (0.05, 0.05)	1342.40 (742.55, 2426.82)	1867.97 (1031.52, 3382.67)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	0.80 (0.80, 0.80)	36436.40 (22431.79, 59184.37)	21268.66 (13093.88, 34547.11)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	0.15 (0.15, 0.15)	21382.01 (14290.76, 31992.01)	23800.10 (15906.91, 35609.98)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	60	5.00 (5.00, 5.00)	17557.19 (14083.55, 21887.60)	1898.08 (1522.55, 2366.23)
Age < 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	60	5.00 (5.00, 5.00)	3325.18 (2691.70, 4107.76)	465.06 (376.46, 574.51)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	30	5.07 (4.93, 5.22)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	61	0.05 (0.05, 0.05)	309.17 (139.46, 685.40)	432.22 (194.97, 958.15)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	61	0.80 (0.80, 0.80)	8935.08 (4923.40, 16215.58)	5215.59 (2873.89, 9465.36)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	61	0.15 (0.15, 0.15)	5285.75 (3306.98, 8448.54)	5883.52 (3680.97, 9403.99)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	61	5.00 (5.00, 5.00)	4133.21 (3044.29, 5611.63)	446.83 (329.11, 606.66)
Age < 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	61	5.00 (5.00, 5.00)	905.71 (699.27, 1173.10)	126.67 (97.80, 164.07)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	184	0.05 (0.05, 0.05)	32.24 (23.25, 44.70)	45.75 (33.23, 62.98)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	0.80 (0.80, 0.80)	339.77 (265.56, 434.72)	198.33 (155.01, 253.76)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	0.15 (0.15, 0.15)	223.80 (182.92, 273.82)	249.11 (203.60, 304.79)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	184	5.00 (5.00, 5.00)	232.65 (201.26, 268.95)	25.15 (21.76, 29.08)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	184	5.00 (5.00, 5.00)	52.68 (46.77, 59.34)	7.36 (6.54, 8.29)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	60	0.05 (0.05, 0.05)	40.07 (24.22, 66.29)	56.01 (33.85, 92.66)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	0.80 (0.80, 0.80)	537.43 (313.80, 920.42)	313.71 (183.17, 537.27)

(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	Positive	Anti Spike IgG (IU/ml)	60	0.15 (0.15, 0.15)	260.79 (174.73, 389.25)	290.29 (194.49, 433.27)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	60	5.00 (5.00, 5.00)	340.93 (271.24, 428.52)	36.86 (29.32, 46.33)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	60	5.00 (5.00, 5.00)	77.62 (63.36, 95.07)	10.81 (8.81, 13.25)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	31	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	31	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	31	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	31	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	31	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)	20.82 (13.53, 32.04)	29.01 (18.88, 44.57)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)	295.38 (199.28, 437.83)	172.42 (116.32, 255.57)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)	138.83 (96.34, 200.06)	154.53 (107.23, 222.69)
Age < 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)	153.37 (126.39, 186.12)	16.58 (13.66, 20.12)

(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	Pseudovirus-nAb ID80	63	5.00 (5.00, 5.00)	38.13 (31.83, 45.67)	5.11 (4.17, 6.27)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	184	0.05 (0.05, 0.05)	319.29 (227.52, 448.09)	444.27 (315.78, 625.05)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	184	0.80 (0.80, 0.80)	10837.61 (8089.20, 14519.85)	6326.13 (4721.83, 8475.53)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	184	0.15 (0.15, 0.15)	5952.20 (4649.86, 7619.31)	6625.34 (5175.71, 8480.98)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	184	5.00 (5.00, 5.00)	5135.31 (4546.20, 5800.77)	555.17 (491.48, 627.11)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	184	5.00 (5.00, 5.00)	1249.66 (1105.17, 1413.04)	174.78 (154.57, 197.63)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	60	0.05 (0.05, 0.05)	472.23 (238.75, 934.03)	660.07 (333.72, 1305.56)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	60	0.80 (0.80, 0.80)	20420.57 (13460.48, 30979.54)	11919.89 (7857.15, 18083.38)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	60	0.15 (0.15, 0.15)	17832.46 (11331.27, 28063.66)	19849.14 (12612.72, 31237.38)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	60	5.00 (5.00, 5.00)	10958.68 (8748.53, 13727.19)	1184.72 (945.79, 1484.02)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	60	5.00 (5.00, 5.00)	2504.23 (1986.65, 3156.66)	350.24 (277.85, 441.49)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	31	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	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	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	31	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	31	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	31	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	31	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)	254.14 (160.39, 402.68)	355.23 (224.19, 562.85)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)	7359.13 (4520.46, 11980.38)	4295.67 (2638.68, 6993.19)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)	5664.16 (3891.33, 8244.68)	6304.72 (4331.40, 9177.07)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)	4177.43 (3244.58, 5378.50)	451.61 (350.76, 581.46)
Age < 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	63	5.00 (5.00, 5.00)	1099.76 (933.39, 1295.77)	153.81 (130.54, 181.23)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	216	0.05 (0.05, 0.05)	126.43 (97.47, 164.00)	175.60 (135.01, 228.40)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	0.80 (0.80, 0.80)	1467.88 (1203.01, 1791.06)	856.83 (702.22, 1045.48)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	0.15 (0.15, 0.15)	894.47 (752.49, 1063.23)	995.63 (837.59, 1183.48)

(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	Negative	Pseudovirus-nAb ID50	216	5.00 (5.00, 5.00)	419.39 (371.53, 473.43)	45.34 (40.17, 51.18)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	216	5.00 (5.00, 5.00)	82.80 (74.75, 91.72)	11.56 (10.43, 12.81)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	48	0.05 (0.05, 0.05)	148.89 (97.31, 227.81)	208.12 (136.02, 318.42)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	0.80 (0.80, 0.80)	2370.06 (1614.14, 3479.99)	1383.45 (942.21, 2031.34)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	0.15 (0.15, 0.15)	1386.46 (940.74, 2043.35)	1543.26 (1047.13, 2274.44)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	48	5.00 (5.00, 5.00)	643.34 (517.46, 799.84)	69.55 (55.94, 86.47)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	48	5.00 (5.00, 5.00)	136.70 (111.01, 168.34)	19.12 (15.53, 23.54)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	30	5.14 (4.87, 5.44)	5.15 (4.86, 5.46)	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	Positive	Anti N IgG (IU/ml)	45	0.05 (0.05, 0.05)	84.29 (51.32, 138.45)	117.67 (71.57, 193.46)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	45	0.80 (0.80, 0.80)	928.81 (593.46, 1453.64)	542.16 (346.42, 848.52)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	45	0.15 (0.15, 0.15)	606.77 (418.27, 880.23)	675.39 (465.57, 979.78)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	45	5.00 (5.00, 5.00)	289.05 (229.10, 364.69)	31.25 (24.77, 39.43)
Age ≥ 65 Communities of Color	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	45	5.00 (5.00, 5.00)	50.58 (41.23, 62.06)	7.14 (5.88, 8.67)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	216	0.05 (0.05, 0.05)	1585.64 (1210.30, 2077.37)	2216.35 (1691.72, 2903.69)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	216	0.80 (0.80, 0.80)	57380.21 (45897.67, 71735.43)	33493.98 (26791.39, 41873.41)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	216	0.15 (0.15, 0.15)	38054.80 (31544.10, 45909.30)	42358.41 (35111.42, 51101.18)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	216	5.00 (5.00, 5.00)	8939.29 (8044.37, 9933.76)	966.41 (869.66, 1073.92)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	216	5.00 (5.00, 5.00)	1656.10 (1491.72, 1838.59)	231.62 (208.63, 257.15)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	48	0.05 (0.05, 0.05)	3491.55 (2093.92, 5822.05)	4880.39 (2926.82, 8137.90)
Age ≥ 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	48	0.80 (0.80, 0.80)	112398.46 (73016.29, 173021.87)	65609.24 (42621.07, 100996.33)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age \geq 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	48	0.15 (0.15, 0.15)	87961.07 (58207.24, 132924.17)	97908.58 (64789.89, 147956.55)
Age \geq 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	48	5.00 (5.00, 5.00)	22068.05 (17363.09, 28047.93)	2385.74 (1877.09, 3032.21)
Age \geq 65 Communities of Color	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	48	5.00 (5.00, 5.00)	3657.96 (3004.55, 4453.48)	511.60 (420.22, 622.86)
Age \geq 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	30	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age \geq 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	30	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age \geq 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	30	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age \geq 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	30	5.00 (5.00, 5.00)	5.11 (4.89, 5.34)	1.00 (1.00, 1.00)
Age \geq 65 Communities of Color	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	30	5.14 (4.87, 5.44)	5.15 (4.86, 5.47)	1.00 (1.00, 1.00)
Age \geq 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	45	0.05 (0.05, 0.05)	1139.18 (602.19, 2155.02)	1592.31 (841.72, 3012.22)
Age \geq 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	45	0.80 (0.80, 0.80)	37368.73 (23365.77, 59763.56)	21812.87 (13639.07, 34885.19)
Age \geq 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	45	0.15 (0.15, 0.15)	27751.46 (18909.11, 40728.70)	30889.87 (21047.54, 45334.71)
Age \geq 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	45	5.00 (5.00, 5.00)	5655.17 (4340.08, 7368.74)	611.37 (469.20, 796.62)

(continued)

Group	Visit	Arm	Baseline SARS-CoV-2	Marker	N	Baseline GMT/GMC	Post Baseline GMT/GMC	GMTR/GMCR
Age \geq 65 Communities of Color	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	45	5.00 (5.00, 5.00)	1305.41 (1026.18, 1660.63)	182.58 (143.52, 232.26)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	180	0.05 (0.05, 0.05)	102.91 (80.39, 131.75)	143.59 (112.08, 183.96)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)	1236.06 (998.97, 1529.43)	721.51 (583.12, 892.76)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)	785.42 (659.93, 934.76)	874.24 (734.57, 1040.47)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)	366.33 (326.65, 410.83)	39.60 (35.31, 44.41)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)	80.86 (72.16, 90.61)	11.33 (10.12, 12.69)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)	161.97 (112.05, 234.15)	226.40 (156.62, 327.28)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)	1927.31 (1354.33, 2742.70)	1125.01 (790.55, 1600.97)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)	1262.19 (962.37, 1655.40)	1404.93 (1071.21, 1842.61)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)	633.68 (537.97, 746.42)	68.51 (58.16, 80.69)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	63	5.00 (5.00, 5.00)	126.77 (107.36, 149.69)	17.73 (15.02, 20.94)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	33	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	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 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	33	5.00 (5.00, 5.00)	5.25 (4.91, 5.60)	1.00 (1.00, 1.00)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	33	5.00 (5.00, 5.00)	5.38 (4.83, 5.99)	1.04 (0.96, 1.12)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	59	0.05 (0.05, 0.05)	57.04 (38.27, 85.02)	78.83 (52.49, 118.38)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	59	0.80 (0.80, 0.80)	847.91 (564.88, 1272.75)	494.94 (329.73, 742.93)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	59	0.15 (0.15, 0.15)	443.01 (318.25, 616.66)	493.11 (354.24, 686.40)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	59	5.00 (5.00, 5.00)	226.02 (186.97, 273.23)	24.43 (20.21, 29.54)
Age \geq 65 White Non-Hispanic	D29 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	59	5.00 (5.00, 5.00)	47.82 (39.50, 57.90)	6.59 (5.40, 8.03)
Age \geq 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti N IgG (IU/ml)	180	0.05 (0.05, 0.05)	1323.04 (954.83, 1833.25)	1849.31 (1334.63, 2562.46)
Age \geq 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti RBD IgG (IU/ml)	180	0.80 (0.80, 0.80)	57459.99 (44526.35, 74150.49)	33540.55 (25990.93, 43283.13)
Age \geq 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Anti Spike IgG (IU/ml)	180	0.15 (0.15, 0.15)	32038.65 (25724.71, 39902.29)	35661.90 (28633.92, 44414.84)

(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	Negative	Pseudovirus-nAb ID50	180	5.00 (5.00, 5.00)	8827.52 (7842.69, 9936.03)	954.33 (847.86, 1074.17)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Negative	Pseudovirus-nAb ID80	180	5.00 (5.00, 5.00)	1728.03 (1547.80, 1929.25)	241.68 (216.47, 269.83)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti N IgG (IU/ml)	63	0.05 (0.05, 0.05)	5032.58 (3196.33, 7923.74)	7034.39 (4467.73, 11075.57)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti RBD IgG (IU/ml)	63	0.80 (0.80, 0.80)	121646.34 (81427.08, 181731.11)	71007.41 (47530.62, 106080.09)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Anti Spike IgG (IU/ml)	63	0.15 (0.15, 0.15)	84148.06 (60933.33, 116207.27)	93664.36 (67824.27, 129349.14)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID50	63	5.00 (5.00, 5.00)	24006.75 (20209.00, 28518.18)	2595.32 (2184.76, 3083.05)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Vaccine	Positive	Pseudovirus-nAb ID80	63	5.00 (5.00, 5.00)	4108.69 (3413.87, 4944.92)	574.64 (477.46, 691.60)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti N IgG (IU/ml)	33	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti RBD IgG (IU/ml)	33	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Anti Spike IgG (IU/ml)	33	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID50	33	5.00 (5.00, 5.00)	5.20 (4.81, 5.63)	1.02 (0.98, 1.07)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Negative	Pseudovirus-nAb ID80	33	5.00 (5.00, 5.00)	5.15 (4.86, 5.46)	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	D57 fold-rise over D1	Placebo	Positive	Anti N IgG (IU/ml)	59	0.05 (0.05, 0.05)	747.35 (438.97, 1272.37)	1044.62 (613.58, 1778.48)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti RBD IgG (IU/ml)	59	0.80 (0.80, 0.80)	37050.81 (23905.13, 57425.44)	21627.30 (13953.90, 33520.38)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Anti Spike IgG (IU/ml)	59	0.15 (0.15, 0.15)	19880.34 (14002.89, 28224.76)	22128.61 (15586.47, 31416.69)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID50	59	5.00 (5.00, 5.00)	6379.52 (5161.60, 7884.82)	689.68 (558.01, 852.41)
Age ≥ 65 White Non-Hispanic	D57 fold-rise over D1	Placebo	Positive	Pseudovirus-nAb ID80	59	5.00 (5.00, 5.00)	1318.55 (1081.27, 1607.89)	184.41 (151.23, 224.88)

1.9 The ratios of GMTs/GMCs between groups

Table 9a. The ratios of GMTs/GMCs between groups by Age

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age							
Age ≥ 65 vs Age < 65	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	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 ≥ 65 vs Age < 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5.06 (4.94, 5.19)	5.03 (4.97, 5.09)	1.01 (0.98, 1.03)
Age ≥ 65 vs Age < 65	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	112.78 (94.24, 134.97)	33.78 (26.87, 42.48)	3.34 (2.50, 4.47)
Age ≥ 65 vs Age < 65	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	1334.32 (1150.75, 1547.17)	362.44 (301.46, 435.76)	3.68 (2.91, 4.66)
Age ≥ 65 vs Age < 65	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	832.20 (735.53, 941.57)	235.04 (202.15, 273.29)	3.54 (2.91, 4.30)
Age ≥ 65 vs Age < 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	389.06 (357.89, 422.94)	231.65 (208.53, 257.33)	1.68 (1.47, 1.92)
Age ≥ 65 vs Age < 65	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	81.72 (75.60, 88.33)	54.06 (49.10, 59.52)	1.51 (1.34, 1.71)
Age ≥ 65 vs Age < 65	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	157.06 (118.61, 207.97)	50.95 (35.13, 73.90)	3.08 (1.93, 4.91)
Age ≥ 65 vs Age < 65	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	2078.88 (1595.78, 2708.23)	639.45 (433.70, 942.79)	3.25 (2.03, 5.20)
Age ≥ 65 vs Age < 65	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	1306.33 (1045.26, 1632.61)	313.11 (233.61, 419.65)	4.17 (2.89, 6.03)

(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 vs Age < 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	637.20 (559.05, 726.29)	371.78 (314.71, 439.20)	1.71 (1.39, 2.12)
Age ≥ 65 vs Age < 65	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	130.32 (114.44, 148.40)	88.61 (76.66, 102.42)	1.47 (1.21, 1.79)
Age ≥ 65 vs Age < 65	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5.13 (4.95, 5.32)	5.00 (5.00, 5.00)	1.03 (0.99, 1.06)
Age ≥ 65 vs Age < 65	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5.28 (4.95, 5.63)	5.00 (5.00, 5.00)	1.06 (0.99, 1.13)
Age ≥ 65 vs Age < 65	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	66.45 (48.61, 90.84)	26.89 (18.62, 38.84)	2.47 (1.52, 4.00)
Age ≥ 65 vs Age < 65	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	878.67 (648.97, 1189.67)	313.09 (225.99, 433.74)	2.81 (1.80, 4.38)
Age ≥ 65 vs Age < 65	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	500.99 (390.66, 642.49)	136.35 (104.62, 177.70)	3.67 (2.55, 5.28)
Age ≥ 65 vs Age < 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	248.84 (214.55, 288.61)	166.35 (141.88, 195.05)	1.50 (1.20, 1.86)
Age ≥ 65 vs Age < 65	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	48.88 (42.45, 56.29)	38.76 (33.51, 44.82)	1.26 (1.03, 1.54)
Age ≥ 65 vs Age < 65	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	1434.05 (1153.94, 1782.14)	322.63 (246.67, 421.99)	4.44 (3.15, 6.28)
Age ≥ 65 vs Age < 65	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	57424.48 (48305.52, 68264.88)	10910.50 (8835.21, 13473.25)	5.26 (4.01, 6.91)
Age ≥ 65 vs Age < 65	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	34588.43 (29833.16, 40101.66)	6333.94 (5273.03, 7608.29)	5.46 (4.31, 6.91)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age ≥ 65 vs Age < 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	8877.08 (8188.96, 9623.03)	5200.88 (4730.59, 5717.92)	1.71 (1.51, 1.93)
Age ≥ 65 vs Age < 65	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	1695.64 (1570.15, 1831.16)	1256.20 (1147.77, 1374.86)	1.35 (1.20, 1.52)
Age ≥ 65 vs Age < 65	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	4402.15 (3113.03, 6225.12)	717.83 (443.04, 1163.03)	6.13 (3.39, 11.11)
Age ≥ 65 vs Age < 65	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	118175.62 (87587.00, 159446.92)	25755.07 (18709.39, 35454.06)	4.59 (2.96, 7.11)
Age ≥ 65 vs Age < 65	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	85524.41 (66310.18, 110306.20)	19178.36 (13955.11, 26356.61)	4.46 (2.97, 6.70)
Age ≥ 65 vs Age < 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	23277.99 (20229.41, 26785.99)	13237.51 (11221.17, 15616.16)	1.76 (1.42, 2.18)
Age ≥ 65 vs Age < 65	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	3937.57 (3429.06, 4521.50)	2805.65 (2379.69, 3307.85)	1.40 (1.13, 1.74)
Age ≥ 65 vs Age < 65	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 vs Age < 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5.16 (4.92, 5.42)	5.00 (5.00, 5.00)	1.03 (0.98, 1.08)
Age ≥ 65 vs Age < 65	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5.15 (4.94, 5.37)	5.00 (5.00, 5.00)	1.03 (0.99, 1.07)
Age ≥ 65 vs Age < 65	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	881.27 (585.70, 1325.97)	277.04 (179.11, 428.53)	3.18 (1.75, 5.78)
Age ≥ 65 vs Age < 65	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	37174.80 (26889.43, 51394.39)	8015.42 (5484.82, 11713.59)	4.64 (2.82, 7.64)
Age ≥ 65 vs Age < 65	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	22649.99 (17454.82, 29391.43)	5494.34 (4090.86, 7379.33)	4.12 (2.78, 6.11)

(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	Placebo	Positive	Pseudovirus-nAb ID50	6085.85 (5156.80, 7182.27)	4157.91 (3421.13, 5053.37)	1.46 (1.13, 1.89)
Age \geq 65 vs Age $<$ 65	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	1313.40 (1126.90, 1530.76)	1009.68 (874.13, 1166.24)	1.30 (1.05, 1.61)

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Table 9b. The ratios of GMTs/GMCs between groups by Risk for Severe Covid-19

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Risk for Severe Covid-19							
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5.13 (4.95, 5.32)	5.00 (5.00, 5.00)	1.03 (0.99, 1.06)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
At-risk vs Not at-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	59.28 (48.71, 72.13)	38.82 (30.40, 49.57)	1.53 (1.12, 2.09)
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	619.80 (526.73, 729.32)	432.83 (355.47, 527.03)	1.43 (1.11, 1.85)
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	375.02 (325.86, 431.60)	284.94 (242.60, 334.67)	1.32 (1.06, 1.63)
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	287.14 (261.84, 314.88)	248.47 (222.14, 277.92)	1.16 (1.00, 1.34)
At-risk vs Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	65.59 (60.47, 71.13)	56.68 (51.14, 62.82)	1.16 (1.01, 1.32)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	74.07 (52.28, 104.94)	60.64 (40.94, 89.82)	1.22 (0.72, 2.07)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	904.26 (673.82, 1213.50)	779.77 (514.53, 1181.75)	1.16 (0.70, 1.93)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	468.34 (362.40, 605.25)	400.63 (292.59, 548.55)	1.17 (0.78, 1.76)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	436.83 (371.53, 513.61)	406.65 (341.08, 484.82)	1.07 (0.85, 1.37)
At-risk vs Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	100.57 (87.22, 115.96)	94.11 (80.74, 109.69)	1.07 (0.87, 1.32)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
At-risk vs Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5.05 (4.95, 5.15)	5.03 (4.98, 5.08)	1.00 (0.98, 1.03)
At-risk vs Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.10 (4.98, 5.21)	0.98 (0.96, 1.00)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	33.12 (23.95, 45.80)	31.68 (21.45, 46.77)	1.05 (0.63, 1.74)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	441.26 (334.12, 582.76)	364.44 (257.23, 516.35)	1.21 (0.77, 1.89)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	196.77 (152.52, 253.86)	168.77 (127.18, 223.97)	1.17 (0.79, 1.71)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	183.54 (157.83, 213.45)	178.59 (150.91, 211.35)	1.03 (0.82, 1.29)
At-risk vs Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	41.54 (36.21, 47.65)	40.21 (34.48, 46.89)	1.03 (0.84, 1.27)
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	658.36 (521.57, 831.02)	380.59 (285.70, 507.00)	1.73 (1.19, 2.51)
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	22341.77 (18573.14, 26875.09)	13507.29 (10771.24, 16938.33)	1.65 (1.23, 2.22)
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	12390.79 (10490.47, 14635.35)	8066.57 (6628.23, 9817.03)	1.54 (1.18, 1.99)
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	6580.38 (6011.76, 7202.78)	5561.29 (5029.53, 6149.26)	1.18 (1.03, 1.36)
At-risk vs Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	1320.45 (1213.71, 1436.57)	1345.94 (1223.10, 1481.12)	0.98 (0.86, 1.11)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	1620.01 (1001.61, 2620.20)	881.47 (531.12, 1462.94)	1.84 (0.91, 3.70)
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	39497.25 (27525.38, 56676.17)	33521.46 (23944.76, 46928.34)	1.18 (0.72, 1.94)
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	28099.59 (20656.04, 38225.48)	25173.01 (17947.02, 35308.40)	1.12 (0.70, 1.77)
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	15043.24 (13016.25, 17385.89)	14754.58 (12362.99, 17608.82)	1.02 (0.81, 1.28)
At-risk vs Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	3015.42 (2586.08, 3516.04)	2999.50 (2519.64, 3570.75)	1.01 (0.80, 1.27)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.06 (4.97, 5.14)	0.99 (0.97, 1.01)
At-risk vs Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.05 (4.98, 5.13)	0.99 (0.98, 1.00)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	373.98 (250.49, 558.33)	337.82 (212.59, 536.81)	1.11 (0.60, 2.04)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	13175.28 (9638.84, 18009.23)	10090.22 (6720.72, 15149.05)	1.31 (0.78, 2.19)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	8459.96 (6305.79, 11350.04)	6856.66 (5014.27, 9376.01)	1.23 (0.80, 1.90)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	4401.65 (3729.38, 5195.11)	4500.16 (3658.74, 5535.09)	0.98 (0.75, 1.28)
At-risk vs Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	1122.35 (977.19, 1289.07)	1043.19 (894.99, 1215.93)	1.08 (0.87, 1.32)

Table 9c. The ratios of GMTs/GMCs between groups by Age < 65, Risk for Severe Covid-19

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, Risk for Severe Covid-19							
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	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)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	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)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	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)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)

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Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5.12 (4.88, 5.37)	5.00 (5.00, 5.00)	1.02 (0.98, 1.07)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	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)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	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)	43.18 (32.88, 56.70)	31.58 (23.82, 41.88)	1.37 (0.92, 2.02)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	397.20 (318.03, 496.08)	353.45 (281.75, 443.39)	1.12 (0.82, 1.54)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	244.00 (201.11, 296.04)	232.64 (193.41, 279.82)	1.05 (0.80, 1.37)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	249.03 (219.07, 283.09)	227.09 (199.55, 258.43)	1.10 (0.91, 1.32)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	61.01 (54.52, 68.27)	52.29 (46.44, 58.88)	1.17 (0.99, 1.37)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	49.48 (30.89, 79.26)	51.36 (32.59, 80.93)	0.96 (0.50, 1.85)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	593.37 (410.70, 857.30)	652.49 (402.55, 1057.62)	0.91 (0.50, 1.67)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	281.08 (204.19, 386.92)	322.37 (224.50, 462.89)	0.87 (0.54, 1.41)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	353.44 (284.96, 438.37)	376.89 (307.49, 461.96)	0.94 (0.70, 1.26)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	90.49 (74.65, 109.69)	88.11 (73.85, 105.11)	1.03 (0.79, 1.33)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	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)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	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)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	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 < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	20.23 (13.05, 31.37)	28.90 (18.48, 45.20)	0.70 (0.37, 1.31)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	277.22 (197.27, 389.57)	322.88 (216.58, 481.36)	0.86 (0.51, 1.45)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	113.16 (83.62, 153.13)	142.94 (103.50, 197.42)	0.79 (0.51, 1.23)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	151.28 (123.98, 184.58)	170.40 (140.50, 206.66)	0.89 (0.67, 1.17)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	36.32 (30.38, 43.43)	39.40 (33.03, 47.00)	0.92 (0.72, 1.18)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	437.34 (317.47, 602.46)	296.78 (213.23, 413.08)	1.47 (0.93, 2.34)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	14227.35 (11021.14, 18366.29)	10143.71 (7824.64, 13150.12)	1.40 (0.97, 2.02)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	7015.69 (5620.04, 8757.92)	6158.65 (4915.01, 7716.97)	1.14 (0.83, 1.56)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	5504.77 (4862.36, 6232.06)	5120.43 (4560.11, 5749.59)	1.08 (0.91, 1.27)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	1180.39 (1048.33, 1329.10)	1277.84 (1144.36, 1426.90)	0.92 (0.79, 1.09)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	856.91 (445.10, 1649.76)	684.30 (380.56, 1230.46)	1.25 (0.52, 3.02)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	21274.96 (13374.99, 33841.05)	27119.28 (18434.91, 39894.70)	0.78 (0.43, 1.43)

(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	Positive	Anti Spike IgG (IU/ml)	16930.25 (11380.64, 25186.06)	19835.17 (13439.47, 29274.49)	0.85 (0.49, 1.49)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	12072.87 (10060.75, 14487.41)	13570.89 (11066.69, 16641.76)	0.89 (0.68, 1.17)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	2581.92 (2116.19, 3150.16)	2869.33 (2344.30, 3511.94)	0.90 (0.68, 1.19)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	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)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	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)	239.76 (144.58, 397.60)	287.37 (168.91, 488.93)	0.83 (0.40, 1.74)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	7739.61 (5270.36, 11365.76)	8086.82 (5077.55, 12879.58)	0.96 (0.52, 1.75)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	4667.11 (3221.43, 6761.58)	5726.20 (4005.09, 8186.91)	0.82 (0.49, 1.36)
Age < 65 At-risk vs Age < 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	3710.81 (3012.73, 4570.64)	4279.46 (3370.96, 5432.81)	0.87 (0.63, 1.19)

(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	Positive	Pseudovirus-nAb ID80	995.94 (840.65, 1179.90)	1013.19 (850.11, 1207.55)	0.98 (0.77, 1.25)

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Table 9d. The ratios of GMTs/GMCs between groups by Age ≥ 65 , Risk for Severe Covid-19

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, Risk for Severe Covid-19							
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	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)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	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)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	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)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	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 ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5.14 (4.87, 5.42)	5.00 (5.00, 5.00)	1.03 (0.97, 1.08)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	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)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	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)	97.96 (75.55, 127.03)	130.13 (101.70, 166.52)	0.75 (0.53, 1.08)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	1254.78 (1012.74, 1554.66)	1420.27 (1158.54, 1741.14)	0.88 (0.66, 1.19)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	741.21 (620.31, 885.69)	936.05 (789.94, 1109.19)	0.79 (0.62, 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 ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	359.84 (318.54, 406.51)	421.16 (376.07, 471.67)	0.85 (0.72, 1.01)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	73.56 (65.89, 82.13)	90.93 (81.62, 101.29)	0.81 (0.69, 0.94)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	155.59 (101.32, 238.92)	158.31 (109.35, 229.20)	0.98 (0.56, 1.73)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	1962.80 (1265.65, 3043.97)	2182.68 (1590.05, 2996.19)	0.90 (0.52, 1.55)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	1198.00 (851.66, 1685.20)	1405.84 (1049.89, 1882.47)	0.85 (0.54, 1.34)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	644.98 (524.64, 792.94)	630.68 (533.79, 745.14)	1.02 (0.78, 1.33)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	122.14 (101.21, 147.40)	137.68 (115.13, 164.64)	0.89 (0.68, 1.15)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	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)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	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)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5.13 (4.88, 5.40)	5.14 (4.87, 5.41)	1.00 (0.93, 1.07)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.53 (4.92, 6.21)	0.90 (0.81, 1.02)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	84.99 (60.96, 118.48)	54.72 (33.57, 89.19)	1.55 (0.86, 2.81)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	1073.54 (717.69, 1605.83)	750.12 (486.05, 1157.68)	1.43 (0.79, 2.59)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	566.90 (402.05, 799.34)	454.41 (319.55, 646.19)	1.25 (0.76, 2.04)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	265.66 (219.29, 321.83)	236.31 (190.12, 293.74)	1.12 (0.84, 1.50)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	53.70 (44.26, 65.17)	45.38 (37.18, 55.39)	1.18 (0.90, 1.56)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	1259.06 (918.90, 1725.14)	1636.70 (1214.70, 2205.29)	0.77 (0.50, 1.19)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	45686.59 (35971.73, 58025.14)	72438.06 (56696.18, 92550.73)	0.63 (0.45, 0.89)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	30525.75 (24376.05, 38226.94)	39268.88 (32484.16, 47470.68)	0.78 (0.58, 1.04)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	8732.03 (7730.16, 9863.76)	9026.88 (8122.85, 10031.54)	0.97 (0.82, 1.14)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	1577.27 (1415.83, 1757.12)	1824.97 (1637.22, 2034.26)	0.86 (0.74, 1.01)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	5227.81 (3005.56, 9093.15)	3805.03 (2468.93, 5864.17)	1.37 (0.68, 2.77)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	123273.66 (77134.92, 197010.57)	114018.04 (77600.41, 167526.34)	1.08 (0.59, 1.98)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	71364.83 (47795.27, 106557.38)	99712.09 (72401.97, 137323.63)	0.72 (0.43, 1.20)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	22546.66 (18323.34, 27743.40)	23916.72 (19779.87, 28918.78)	0.94 (0.71, 1.25)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	4011.87 (3209.05, 5015.53)	3875.65 (3264.89, 4600.67)	1.04 (0.78, 1.37)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	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)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.31 (4.86, 5.79)	0.94 (0.86, 1.03)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.29 (4.90, 5.71)	0.95 (0.88, 1.02)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	875.25 (477.82, 1603.24)	886.05 (508.08, 1545.18)	0.99 (0.43, 2.25)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	36447.15 (23445.94, 56657.78)	37759.61 (23803.97, 59897.06)	0.97 (0.51, 1.82)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	26390.54 (18738.38, 37167.59)	20074.92 (13744.82, 29320.31)	1.31 (0.79, 2.20)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	6101.45 (4731.84, 7867.49)	6073.55 (4882.70, 7554.83)	1.00 (0.72, 1.40)

(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	Positive	Pseudovirus-nAb ID80	1410.55 (1120.58, 1775.55)	1241.44 (1012.38, 1522.32)	1.14 (0.84, 1.55)

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Table 9e. The ratios of GMTs/GMCs between groups by Sex

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Sex							
Male vs Female	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5.04 (4.96, 5.11)	5.04 (4.96, 5.12)	1.00 (0.98, 1.02)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Male vs Female	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Male vs Female	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Male vs Female	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	35.73 (27.60, 46.26)	50.27 (38.82, 65.10)	0.71 (0.49, 1.03)
Male vs Female	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	408.17 (328.51, 507.15)	534.54 (435.45, 656.16)	0.76 (0.56, 1.03)
Male vs Female	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	268.04 (222.09, 323.50)	338.75 (287.81, 398.69)	0.79 (0.61, 1.02)
Male vs Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	234.63 (208.87, 263.58)	277.04 (245.98, 312.01)	0.85 (0.72, 1.00)
Male vs Female	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	55.67 (49.52, 62.58)	61.50 (55.42, 68.25)	0.91 (0.77, 1.06)
Male vs Female	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	82.92 (53.27, 129.07)	54.79 (36.48, 82.31)	1.51 (0.83, 2.77)
Male vs Female	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	916.03 (597.66, 1403.97)	754.21 (488.52, 1164.38)	1.21 (0.66, 2.23)
Male vs Female	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	551.61 (386.90, 786.43)	354.00 (256.55, 488.47)	1.56 (0.96, 2.52)
Male vs Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	454.94 (367.86, 562.63)	392.10 (328.64, 467.82)	1.16 (0.88, 1.53)
Male vs Female	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	102.09 (83.27, 125.16)	92.21 (79.37, 107.12)	1.11 (0.86, 1.43)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Male vs Female	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Male vs Female	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Male vs Female	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Male vs Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5.08 (4.97, 5.19)	5.00 (5.00, 5.00)	1.02 (0.99, 1.04)
Male vs Female	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.12 (4.98, 5.26)	0.98 (0.95, 1.00)
Male vs Female	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	24.60 (17.02, 35.55)	39.49 (25.50, 61.15)	0.62 (0.35, 1.10)
Male vs Female	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	316.27 (226.83, 440.98)	444.10 (297.05, 663.97)	0.71 (0.42, 1.21)
Male vs Female	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	150.42 (112.72, 200.73)	198.00 (144.09, 272.08)	0.76 (0.49, 1.17)
Male vs Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	165.07 (140.09, 194.49)	192.44 (159.14, 232.72)	0.86 (0.67, 1.10)
Male vs Female	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	39.87 (33.21, 47.88)	41.06 (35.01, 48.17)	0.97 (0.76, 1.24)
Male vs Female	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	380.77 (277.84, 521.84)	492.86 (365.71, 664.20)	0.77 (0.50, 1.20)
Male vs Female	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	13533.28 (11029.52, 16605.41)	17107.99 (13216.22, 22145.76)	0.79 (0.57, 1.11)
Male vs Female	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	7771.48 (6160.25, 9804.13)	10143.19 (8328.92, 12352.65)	0.77 (0.56, 1.05)
Male vs Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	5527.99 (4908.12, 6226.14)	6046.91 (5463.04, 6693.19)	0.91 (0.78, 1.07)
Male vs Female	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	1280.14 (1145.14, 1431.05)	1381.96 (1254.89, 1521.90)	0.93 (0.80, 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
Male vs Female	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	1473.17 (729.72, 2974.04)	838.91 (516.31, 1363.08)	1.76 (0.74, 4.18)
Male vs Female	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	45491.95 (29036.52, 71272.93)	29972.37 (21490.80, 41801.29)	1.52 (0.86, 2.67)
Male vs Female	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	31608.49 (21476.07, 46521.39)	23039.26 (16238.88, 32687.46)	1.37 (0.81, 2.31)
Male vs Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	17069.85 (13630.63, 21376.84)	13647.49 (11455.34, 16259.15)	1.25 (0.94, 1.67)
Male vs Female	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	3179.99 (2632.21, 3841.77)	2904.16 (2416.88, 3489.69)	1.09 (0.84, 1.43)
Male vs Female	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Male vs Female	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Male vs Female	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Male vs Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5.09 (4.95, 5.24)	5.00 (5.00, 5.00)	1.02 (0.99, 1.05)
Male vs Female	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5.04 (4.96, 5.12)	5.03 (4.97, 5.10)	1.00 (0.98, 1.02)
Male vs Female	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	245.91 (143.25, 422.16)	454.77 (285.53, 724.33)	0.54 (0.26, 1.10)
Male vs Female	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	8699.01 (5973.03, 12669.08)	12783.05 (7966.70, 20511.19)	0.68 (0.37, 1.25)
Male vs Female	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	5456.50 (3910.97, 7612.80)	9025.72 (6465.76, 12599.25)	0.60 (0.38, 0.97)
Male vs Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	4419.86 (3593.90, 5435.63)	4520.15 (3568.73, 5725.23)	0.98 (0.71, 1.34)
Male vs Female	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	1023.05 (873.98, 1197.54)	1094.53 (915.38, 1308.76)	0.93 (0.73, 1.19)

Table 9f. The ratios of GMTs/GMCs between groups by Hispanic or Latino ethnicity

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 ethnicity							
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.04 (4.98, 5.11)	0.99 (0.98, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	42.13 (23.60, 75.21)	43.49 (35.64, 53.06)	0.97 (0.52, 1.79)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	491.43 (292.25, 826.38)	471.23 (402.48, 551.72)	1.04 (0.61, 1.80)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	341.22 (227.33, 512.17)	301.50 (264.57, 343.59)	1.13 (0.74, 1.74)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	250.45 (192.03, 326.66)	259.55 (236.90, 284.37)	0.96 (0.73, 1.28)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	65.10 (50.29, 84.27)	58.61 (53.95, 63.67)	1.11 (0.85, 1.46)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	73.32 (35.19, 152.74)	60.79 (43.56, 84.84)	1.21 (0.54, 2.70)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	958.71 (389.66, 2358.79)	789.28 (557.62, 1117.18)	1.21 (0.46, 3.19)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	506.17 (276.73, 925.85)	395.43 (303.86, 514.59)	1.28 (0.66, 2.48)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	488.33 (328.76, 725.36)	401.25 (346.18, 465.08)	1.22 (0.80, 1.86)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	130.30 (92.68, 183.19)	90.71 (79.89, 102.99)	1.44 (1.00, 2.07)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.04 (4.99, 5.09)	0.99 (0.98, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.08 (4.99, 5.17)	0.98 (0.97, 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 29	Placebo	Positive	Anti N IgG (IU/ml)	33.50 (17.23, 65.13)	31.50 (22.59, 43.93)	1.06 (0.51, 2.24)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	377.54 (202.81, 702.81)	380.24 (282.81, 511.23)	0.99 (0.50, 1.98)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	127.47 (72.54, 224.00)	179.86 (141.59, 228.48)	0.71 (0.38, 1.31)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	167.68 (122.53, 229.48)	180.48 (156.33, 208.35)	0.93 (0.66, 1.31)
Hispanic or Latino vs Not Hispanic or Latino	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	35.14 (24.29, 50.82)	41.07 (36.16, 46.65)	0.86 (0.58, 1.26)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	646.14 (331.54, 1259.27)	424.40 (335.96, 536.12)	1.52 (0.75, 3.09)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	16880.81 (9915.67, 28738.51)	15177.42 (12612.30, 18264.25)	1.11 (0.63, 1.96)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	10290.17 (6529.63, 16216.48)	8957.40 (7622.67, 10525.84)	1.15 (0.71, 1.86)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	5633.49 (4263.48, 7443.73)	5850.58 (5397.25, 6341.99)	0.96 (0.72, 1.29)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	1299.55 (1081.50, 1561.57)	1347.26 (1242.57, 1460.78)	0.96 (0.79, 1.18)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	2361.11 (860.83, 6476.16)	895.24 (582.59, 1375.68)	2.64 (0.88, 7.90)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	66810.96 (26355.86, 169362.87)	31294.34 (23695.05, 41330.83)	2.13 (0.81, 5.63)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	19623.56 (9531.75, 40400.17)	26107.79 (19593.72, 34787.50)	0.75 (0.35, 1.64)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	18131.58 (12027.32, 27333.97)	14264.14 (12313.15, 16524.25)	1.27 (0.82, 1.97)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	2871.89 (2057.28, 4009.06)	2936.50 (2534.07, 3402.83)	0.98 (0.68, 1.41)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.05 (4.98, 5.12)	0.99 (0.98, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.04 (4.98, 5.10)	0.99 (0.98, 1.00)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	421.38 (146.98, 1208.07)	336.79 (228.62, 496.13)	1.25 (0.41, 3.85)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	5832.92 (3719.30, 9147.68)	11481.92 (8121.74, 16232.31)	0.51 (0.29, 0.90)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	8718.57 (4671.50, 16271.78)	6982.30 (5351.20, 9110.58)	1.25 (0.63, 2.47)
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	3785.33 (2431.92, 5891.93)	4559.26 (3833.09, 5423.00)	0.83 (0.52, 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
Hispanic or Latino vs Not Hispanic or Latino	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	812.86 (499.53, 1322.75)	1096.59 (968.61, 1241.49)	0.74 (0.45, 1.23)

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Table 9g. The ratios of GMTs/GMCs between groups by Communities of color

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							
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Negative	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Positive	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Vaccine	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	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 RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Negative	Pseudovirus-nAb ID80	5.09 (4.96, 5.22)	5.00 (5.00, 5.00)	1.02 (0.99, 1.04)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Positive	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Positive	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Positive	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 1	Placebo	Positive	Pseudovirus-nAb ID80	5.00 (5.00, 5.00)	5.00 (5.00, 5.00)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Anti N IgG (IU/ml)	47.26 (36.70, 60.86)	41.06 (31.51, 53.49)	1.15 (0.80, 1.66)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Anti RBD IgG (IU/ml)	525.41 (419.74, 657.70)	444.62 (363.50, 543.85)	1.18 (0.87, 1.60)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Anti Spike IgG (IU/ml)	330.77 (274.54, 398.51)	290.68 (246.41, 342.91)	1.14 (0.88, 1.46)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID50	262.44 (232.16, 296.66)	255.72 (227.37, 287.61)	1.03 (0.87, 1.22)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Negative	Pseudovirus-nAb ID80	60.92 (53.65, 69.18)	57.60 (52.24, 63.50)	1.06 (0.90, 1.24)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Anti N IgG (IU/ml)	83.38 (55.09, 126.19)	53.76 (35.74, 80.87)	1.55 (0.87, 2.76)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Anti RBD IgG (IU/ml)	1009.14 (666.67, 1527.55)	703.12 (455.68, 1084.94)	1.44 (0.79, 2.60)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Anti Spike IgG (IU/ml)	516.48 (374.80, 711.70)	363.42 (262.18, 503.74)	1.42 (0.90, 2.24)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID50	457.67 (379.69, 551.66)	388.43 (322.77, 467.45)	1.18 (0.91, 1.53)
Communities of Color vs White Non-Hispanic	Day 29	Vaccine	Positive	Pseudovirus-nAb ID80	112.88 (96.81, 131.60)	86.06 (72.97, 101.49)	1.31 (1.05, 1.64)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID50	5.00 (5.00, 5.00)	5.06 (4.98, 5.14)	0.99 (0.97, 1.00)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Negative	Pseudovirus-nAb ID80	5.04 (4.96, 5.12)	5.09 (4.96, 5.22)	0.99 (0.96, 1.02)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Anti N IgG (IU/ml)	42.97 (25.86, 71.39)	25.64 (18.01, 36.52)	1.68 (0.90, 3.11)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Anti RBD IgG (IU/ml)	402.72 (257.62, 629.53)	367.32 (265.15, 508.86)	1.10 (0.63, 1.90)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Anti Spike IgG (IU/ml)	173.85 (125.33, 241.16)	176.46 (130.58, 238.44)	0.99 (0.63, 1.54)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID50	199.57 (160.88, 247.56)	166.17 (141.73, 194.83)	1.20 (0.92, 1.57)
Communities of Color vs White Non-Hispanic	Day 29	Placebo	Positive	Pseudovirus-nAb ID80	41.31 (33.87, 50.39)	39.95 (34.43, 46.36)	1.03 (0.81, 1.32)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Anti N IgG (IU/ml)	461.29 (324.93, 654.86)	429.31 (325.12, 566.88)	1.07 (0.68, 1.69)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Anti RBD IgG (IU/ml)	15770.77 (12329.03, 20173.30)	15339.37 (12072.43, 19490.37)	1.03 (0.73, 1.46)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Anti Spike IgG (IU/ml)	9980.31 (8002.73, 12446.57)	8451.21 (6898.39, 10353.56)	1.18 (0.87, 1.60)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID50	5929.17 (5260.13, 6683.31)	5748.65 (5201.26, 6353.65)	1.03 (0.88, 1.21)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Negative	Pseudovirus-nAb ID80	1341.33 (1206.32, 1491.45)	1336.93 (1209.59, 1477.67)	1.00 (0.87, 1.16)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Anti N IgG (IU/ml)	1605.20 (984.07, 2618.40)	776.96 (446.42, 1352.24)	2.07 (0.99, 4.32)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Anti RBD IgG (IU/ml)	44982.36 (30010.58, 67423.30)	29727.42 (21038.85, 42004.17)	1.51 (0.89, 2.58)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Anti Spike IgG (IU/ml)	27857.30 (19962.25, 38874.83)	24717.56 (17094.43, 35740.18)	1.13 (0.69, 1.85)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID50	18324.42 (15234.23, 22041.44)	12924.84 (10755.64, 15531.53)	1.42 (1.09, 1.84)
Communities of Color vs White Non-Hispanic	Day 57	Vaccine	Positive	Pseudovirus-nAb ID80	3385.04 (2840.22, 4034.36)	2779.22 (2303.45, 3353.26)	1.22 (0.94, 1.57)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Negative	Anti N IgG (IU/ml)	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Negative	Anti RBD IgG (IU/ml)	0.80 (0.80, 0.80)	0.80 (0.80, 0.80)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Negative	Anti Spike IgG (IU/ml)	0.15 (0.15, 0.15)	0.15 (0.15, 0.15)	1.00 (1.00, 1.00)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID50	5.03 (4.97, 5.09)	5.05 (4.95, 5.14)	1.00 (0.97, 1.02)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Negative	Pseudovirus-nAb ID80	5.04 (4.96, 5.12)	5.03 (4.97, 5.10)	1.00 (0.98, 1.02)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Anti N IgG (IU/ml)	388.64 (200.06, 754.96)	317.61 (216.44, 466.09)	1.22 (0.57, 2.63)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Anti RBD IgG (IU/ml)	11484.07 (6968.52, 18925.69)	10278.20 (6874.74, 15366.60)	1.12 (0.59, 2.12)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Anti Spike IgG (IU/ml)	7070.15 (4740.81, 10543.98)	7342.45 (5384.54, 10012.29)	0.96 (0.58, 1.60)
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID50	4366.87 (3382.69, 5637.40)	4559.48 (3711.18, 5601.69)	0.96 (0.69, 1.33)

(continued)

Group 1 vs 2	Visit	Arm	Baseline SARS-CoV-2	Marker	Group 1 GMT/GMC	Group 2 GMT/GMC	Ratios of GMT/GMC
Communities of Color vs White Non-Hispanic	Day 57	Placebo	Positive	Pseudovirus-nAb ID80	965.69 (778.11, 1198.49)	1141.78 (996.05, 1308.83)	0.85 (0.66, 1.09)

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1.10 Differences in the responder rates, 2FRs, 4FRs between the groups

Table 10a. Differences in the responder rates, 2FRs, 4FRs between the groups by Arm

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Arm							
Vaccine vs Placebo	Negative	-	Day 29	Anti N IgG (IU/ml)	1 (0.99, 1)	1 (0.99, 1)	0.96 (0.94, 0.98)
Vaccine vs Placebo	Negative	-	Day 29	Anti RBD IgG (IU/ml)	1 (1, 1)	1 (1, 1)	1 (1, 1)
Vaccine vs Placebo	Negative	-	Day 29	Anti Spike IgG (IU/ml)	1 (1, 1)	1 (1, 1)	1 (1, 1)
Vaccine vs Placebo	Negative	-	Day 29	Pseudovirus-nAb ID50	1 (0.99, 1)	0.99 (0.97, 1)	1 (0.99, 1)
Vaccine vs Placebo	Negative	-	Day 29	Pseudovirus-nAb ID80	0.91 (0.87, 0.93)	0.97 (0.94, 0.98)	0.96 (0.93, 0.98)
Vaccine vs Placebo	Positive	-	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.03 (0.01, 0.07)
Vaccine vs Placebo	Positive	-	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.01 (0, 0.07)
Vaccine vs Placebo	Positive	-	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Vaccine vs Placebo	Positive	-	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Vaccine vs Placebo	Positive	-	Day 29	Pseudovirus-nAb ID80	0.14 (0.08, 0.21)	0.01 (0, 0.02)	0.07 (0.03, 0.14)
Vaccine vs Placebo	Negative	-	Day 57	Anti N IgG (IU/ml)	1 (1, 1)	1 (1, 1)	1 (0.98, 1)
Vaccine vs Placebo	Negative	-	Day 57	Anti RBD IgG (IU/ml)	1 (1, 1)	1 (1, 1)	1 (1, 1)
Vaccine vs Placebo	Negative	-	Day 57	Anti Spike IgG (IU/ml)	1 (1, 1)	1 (1, 1)	1 (1, 1)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Vaccine vs Placebo	Negative	-	Day 57	Pseudovirus-nAb ID50	1 (1, 1)	0.99 (0.97, 1)	1 (0.97, 1)
Vaccine vs Placebo	Negative	-	Day 57	Pseudovirus-nAb ID80	1 (1, 1)	0.99 (0.97, 1)	1 (1, 1)
Vaccine vs Placebo	Positive	-	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (-0.02, 0.02)
Vaccine vs Placebo	Positive	-	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Vaccine vs Placebo	Positive	-	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Vaccine vs Placebo	Positive	-	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Vaccine vs Placebo	Positive	-	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

Table 10b. Differences in the responder rates, 2FRs, 4FRs between the groups by Baseline SARS-CoV-2

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Baseline SARS-CoV-2							
Positive vs Negative	-	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (0, 0.01)	0 (0, 0.01)	0.04 (0.02, 0.06)
Positive vs Negative	-	Placebo	Day 29	Anti N IgG (IU/ml)	1 (1, 1)	1 (1, 1)	0.97 (0.93, 0.99)
Positive vs Negative	-	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Positive vs Negative	-	Placebo	Day 29	Anti RBD IgG (IU/ml)	1 (1, 1)	1 (1, 1)	0.99 (0.93, 1)
Positive vs Negative	-	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Positive vs Negative	-	Placebo	Day 29	Anti Spike IgG (IU/ml)	1 (1, 1)	1 (1, 1)	1 (1, 1)
Positive vs Negative	-	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (0, 0.01)	0 (0, 0)	0 (0, 0.01)
Positive vs Negative	-	Placebo	Day 29	Pseudovirus-nAb ID50	1 (1, 1)	0.99 (0.97, 1)	1 (1, 1)
Positive vs Negative	-	Vaccine	Day 29	Pseudovirus-nAb ID80	0.08 (0.05, 0.12)	0.02 (0.01, 0.04)	0.03 (0, 0.05)
Positive vs Negative	-	Placebo	Day 29	Pseudovirus-nAb ID80	0.85 (0.77, 0.9)	0.98 (0.95, 0.99)	0.92 (0.85, 0.95)
Positive vs Negative	-	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (-0.01, 0.02)
Positive vs Negative	-	Placebo	Day 57	Anti N IgG (IU/ml)	1 (1, 1)	1 (1, 1)	1 (0.98, 1)
Positive vs Negative	-	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Positive vs Negative	-	Placebo	Day 57	Anti RBD IgG (IU/ml)	1 (1, 1)	1 (1, 1)	1 (1, 1)
Positive vs Negative	-	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Positive vs Negative	-	Placebo	Day 57	Anti Spike IgG (IU/ml)	1 (1, 1)	1 (1, 1)	1 (1, 1)
Positive vs Negative	-	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Positive vs Negative	-	Placebo	Day 57	Pseudovirus-nAb ID50	1 (1, 1)	0.99 (0.97, 1)	1 (0.97, 1)
Positive vs Negative	-	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Positive vs Negative	-	Placebo	Day 57	Pseudovirus-nAb ID80	1 (1, 1)	0.99 (0.97, 1)	1 (1, 1)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

Table 10c. Differences in the responder rates, 2FRs, 4FRs between the groups by Age

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Age							
Age ≥ 65 vs Age < 65	Negative	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (0, 0.01)	0 (0, 0.01)	0.03 (0.01, 0.06)
Age ≥ 65 vs Age < 65	Negative	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 vs Age < 65	Negative	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 vs Age < 65	Negative	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 vs Age < 65	Negative	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 vs Age < 65	Negative	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 vs Age < 65	Negative	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (0, 0.01)	0 (0, 0)	0 (0, 0.01)
Age ≥ 65 vs Age < 65	Negative	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0.03 (0.01, 0.13)	0 (0, 0)
Age ≥ 65 vs Age < 65	Negative	Vaccine	Day 29	Pseudovirus-nAb ID80	0.07 (0.03, 0.12)	0.02 (0, 0.04)	0.03 (0.01, 0.07)
Age ≥ 65 vs Age < 65	Negative	Placebo	Day 29	Pseudovirus-nAb ID80	0.02 (0, 0.12)	0.05 (0.02, 0.15)	0.02 (0, 0.12)
Age ≥ 65 vs Age < 65	Positive	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 vs Age < 65	Positive	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.01 (-0.04, 0.07)
Age ≥ 65 vs Age < 65	Positive	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 vs Age < 65	Positive	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.01 (0, 0.09)
Age ≥ 65 vs Age < 65	Positive	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Age \geq 65 vs Age < 65	Positive	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Positive	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Positive	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Positive	Vaccine	Day 29	Pseudovirus-nAb ID80	0 (-0.04, 0.02)	0 (0, 0)	0.01 (0, 0.03)
Age \geq 65 vs Age < 65	Positive	Placebo	Day 29	Pseudovirus-nAb ID80	0.09 (0, 0.19)	-0.02 (-0.08, 0.01)	0.05 (-0.03, 0.13)
Age \geq 65 vs Age < 65	Negative	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.01 (0, 0.03)
Age \geq 65 vs Age < 65	Negative	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Negative	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Negative	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Negative	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Negative	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Negative	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Negative	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0.03 (0.01, 0.12)	0.02 (0, 0.12)
Age \geq 65 vs Age < 65	Negative	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Negative	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0.03 (0.01, 0.12)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Age \geq 65 vs Age < 65	Positive	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0.02)
Age \geq 65 vs Age < 65	Positive	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0.03)
Age \geq 65 vs Age < 65	Positive	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Positive	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Positive	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Positive	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Positive	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Positive	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Positive	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 vs Age < 65	Positive	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

Table 10d. Differences in the responder rates, 2FRs, 4FRs between the groups by Risk for Severe Covid-19

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Risk for Severe Covid-19							
At-risk vs Not at-risk	Negative	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (-0.02, 0)	0 (-0.02, 0)	0 (-0.03, 0.04)
At-risk vs Not at-risk	Negative	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Vaccine	Day 29	Pseudovirus-nAb ID50	-0.01 (-0.02, 0)	0 (0, 0)	-0.01 (-0.02, 0)
At-risk vs Not at-risk	Negative	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0.01 (-0.03, 0.09)	0 (0, 0)
At-risk vs Not at-risk	Negative	Vaccine	Day 29	Pseudovirus-nAb ID80	0.04 (0, 0.09)	0.01 (-0.02, 0.04)	0.02 (-0.01, 0.06)
At-risk vs Not at-risk	Negative	Placebo	Day 29	Pseudovirus-nAb ID80	-0.01 (-0.04, 0)	-0.02 (-0.05, -0.01)	-0.01 (-0.04, 0)
At-risk vs Not at-risk	Positive	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.04 (-0.12, 0.04)
At-risk vs Not at-risk	Positive	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.01 (0, 0.09)
At-risk vs Not at-risk	Positive	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
At-risk vs Not at-risk	Positive	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Vaccine	Day 29	Pseudovirus-nAb ID80	-0.03 (-0.09, -0.01)	0 (0, 0)	-0.02 (-0.08, -0.01)
At-risk vs Not at-risk	Positive	Placebo	Day 29	Pseudovirus-nAb ID80	0 (-0.1, 0.12)	-0.02 (-0.08, 0)	0.01 (-0.07, 0.11)
At-risk vs Not at-risk	Negative	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	-0.01 (-0.04, 0)	-0.01 (-0.04, 0)
At-risk vs Not at-risk	Negative	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Negative	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	-0.01 (-0.04, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
At-risk vs Not at-risk	Positive	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.01 (-0.07, 0)
At-risk vs Not at-risk	Positive	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.01 (-0.08, 0)
At-risk vs Not at-risk	Positive	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
At-risk vs Not at-risk	Positive	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

Table 10e. Differences in the responder rates, 2FRs, 4FRs between the groups by Age < 65, Risk for Severe Covid-19

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Age < 65, Risk for Severe Covid-19							
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (-0.03, 0)	0 (-0.03, 0)	0 (-0.05, 0.05)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Vaccine	Day 29	Pseudovirus-nAb ID50	-0.01 (-0.04, 0)	0 (0, 0)	-0.01 (-0.04, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Vaccine	Day 29	Pseudovirus-nAb ID80	0.05 (-0.01, 0.12)	0.01 (-0.03, 0.04)	0.02 (-0.02, 0.07)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Placebo	Day 29	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.08 (-0.18, 0.04)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.02 (0, 0.11)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Vaccine	Day 29	Pseudovirus-nAb ID80	-0.03 (-0.13, -0.01)	0 (0, 0)	-0.03 (-0.13, -0.01)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Placebo	Day 29	Pseudovirus-nAb ID80	-0.05 (-0.2, 0.1)	-0.02 (-0.12, 0)	-0.01 (-0.13, 0.11)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (-0.03, 0.04)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Negative	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.02 (-0.11, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.02 (-0.12, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age < 65 At-risk vs Age < 65 Not at-risk	Positive	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

Table 10f. Differences in the responder rates, 2FRs, 4FRs between the groups by Age ≥ 65 , Risk for Severe Covid-19

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Age ≥ 65, Risk for Severe Covid-19							
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Negative	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.02 (-0.06, -0.01)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Negative	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Negative	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Negative	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Negative	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Negative	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Negative	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Negative	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0.01 (-0.17, 0.21)	0 (0, 0)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Negative	Vaccine	Day 29	Pseudovirus-nAb ID80	-0.04 (-0.09, 0)	-0.01 (-0.04, 0)	-0.01 (-0.04, 0)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Negative	Placebo	Day 29	Pseudovirus-nAb ID80	-0.03 (-0.21, 0)	-0.09 (-0.26, -0.03)	-0.03 (-0.21, 0)
Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk	Positive	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.03 (0.01, 0.13)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Vaccine	Day 29	Pseudovirus-nAb ID80	-0.02 (-0.1, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Placebo	Day 29	Pseudovirus-nAb ID80	0.08 (-0.06, 0.2)	0 (-0.14, 0.1)	0.03 (-0.11, 0.14)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Negative	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Negative	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Negative	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Negative	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Negative	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Negative	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Negative	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Negative	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	-0.06 (-0.22, -0.01)	-0.03 (-0.21, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Negative	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Negative	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	-0.06 (-0.22, -0.01)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Age \geq 65 At-risk vs Age \geq 65 Not at-risk	Positive	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

Table 10g. Differences in the responder rates, 2FRs, 4FRs between the groups by Sex

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Sex							
Male vs Female	Negative	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (0, 0.01)	0 (0, 0.01)	0 (-0.05, 0.04)
Male vs Female	Negative	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (-0.01, 0.01)	0 (0, 0)	0 (-0.01, 0.01)
Male vs Female	Negative	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0.02 (0, 0.08)	0 (0, 0)
Male vs Female	Negative	Vaccine	Day 29	Pseudovirus-nAb ID80	-0.04 (-0.11, 0.02)	0.01 (-0.04, 0.04)	-0.01 (-0.06, 0.03)
Male vs Female	Negative	Placebo	Day 29	Pseudovirus-nAb ID80	-0.01 (-0.05, 0)	-0.02 (-0.06, -0.01)	-0.01 (-0.05, 0)
Male vs Female	Positive	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.03 (-0.02, 0.1)
Male vs Female	Positive	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.02 (0, 0.12)
Male vs Female	Positive	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Male vs Female	Positive	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Vaccine	Day 29	Pseudovirus-nAb ID80	0.01 (-0.02, 0.03)	0 (0, 0)	0.01 (0, 0.04)
Male vs Female	Positive	Placebo	Day 29	Pseudovirus-nAb ID80	0 (-0.14, 0.13)	0 (-0.02, 0.03)	-0.04 (-0.17, 0.06)
Male vs Female	Negative	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.01 (-0.06, 0)
Male vs Female	Negative	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0.02 (0, 0.07)	0.01 (0, 0.07)
Male vs Female	Negative	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Negative	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (-0.04, 0.05)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Male vs Female	Positive	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0.03)
Male vs Female	Positive	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.01 (0, 0.04)
Male vs Female	Positive	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Male vs Female	Positive	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

Table 10h. Differences in the responder rates, 2FRs, 4FRs between the groups by Hispanic or Latino ethnicity

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Hispanic or Latino ethnicity							
Hispanic or Latino vs Not Hispanic or Latino	Negative	Vaccine	Day 29	Anti N IgG (IU/ml)	-0.01 (-0.05, 0)	-0.01 (-0.05, 0)	-0.06 (-0.18, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Vaccine	Day 29	Pseudovirus-nAb ID50	-0.01 (-0.06, 0)	0 (0, 0)	-0.01 (-0.06, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	-0.01 (-0.04, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Vaccine	Day 29	Pseudovirus-nAb ID80	0 (-0.13, 0.07)	-0.02 (-0.13, 0.02)	-0.03 (-0.15, 0.02)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Placebo	Day 29	Pseudovirus-nAb ID80	0 (-0.03, 0)	-0.01 (-0.04, 0)	0 (-0.03, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Hispanic or Latino vs Not Hispanic or Latino	Positive	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.02 (-0.08, 0.07)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.01 (0, 0.08)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Vaccine	Day 29	Pseudovirus-nAb ID80	-0.01 (-0.1, 0.02)	0 (0, 0)	0.01 (0, 0.03)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Placebo	Day 29	Pseudovirus-nAb ID80	-0.07 (-0.42, 0.1)	0.01 (0, 0.02)	-0.02 (-0.42, 0.09)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (-0.05, 0.02)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Hispanic or Latino vs Not Hispanic or Latino	Negative	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	-0.01 (-0.04, 0)	0 (-0.03, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Negative	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	-0.01 (-0.04, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.03 (-0.19, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0.02)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Hispanic or Latino vs Not Hispanic or Latino	Positive	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Hispanic or Latino vs Not Hispanic or Latino	Positive	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

Table 10i. Differences in the responder rates, 2FRs, 4FRs between the groups by Communities of color

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Communities of color							
Communities of Color vs White Non-Hispanic	Negative	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (-0.01, 0)	0 (-0.01, 0)	0 (-0.04, 0.04)
Communities of Color vs White Non-Hispanic	Negative	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (-0.02, 0)	0 (0, 0)	0 (-0.02, 0)
Communities of Color vs White Non-Hispanic	Negative	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	-0.01 (-0.06, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Vaccine	Day 29	Pseudovirus-nAb ID80	0.01 (-0.05, 0.07)	-0.02 (-0.06, 0.02)	-0.03 (-0.08, 0.01)
Communities of Color vs White Non-Hispanic	Negative	Placebo	Day 29	Pseudovirus-nAb ID80	-0.01 (-0.05, 0)	0 (-0.05, 0.06)	-0.01 (-0.05, 0)
Communities of Color vs White Non-Hispanic	Positive	Vaccine	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Communities of Color vs White Non-Hispanic	Positive	Placebo	Day 29	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0.02 (-0.02, 0.1)
Communities of Color vs White Non-Hispanic	Positive	Vaccine	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Placebo	Day 29	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.02 (-0.16, 0)
Communities of Color vs White Non-Hispanic	Positive	Vaccine	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Placebo	Day 29	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Vaccine	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Placebo	Day 29	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Vaccine	Day 29	Pseudovirus-nAb ID80	-0.01 (-0.04, 0.03)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Placebo	Day 29	Pseudovirus-nAb ID80	-0.03 (-0.17, 0.1)	0 (-0.03, 0.03)	-0.02 (-0.15, 0.09)
Communities of Color vs White Non-Hispanic	Negative	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (-0.01, 0.04)
Communities of Color vs White Non-Hispanic	Negative	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Communities of Color vs White Non-Hispanic	Negative	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (-0.04, 0.05)	-0.01 (-0.05, 0)
Communities of Color vs White Non-Hispanic	Negative	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Negative	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (-0.04, 0.05)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Vaccine	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.01 (-0.05, 0)
Communities of Color vs White Non-Hispanic	Positive	Placebo	Day 57	Anti N IgG (IU/ml)	0 (0, 0)	0 (0, 0)	-0.01 (-0.05, 0)
Communities of Color vs White Non-Hispanic	Positive	Vaccine	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Placebo	Day 57	Anti RBD IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Vaccine	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)

(continued)

Comparison	Baseline SARS-CoV-2	Arm	Visit	Marker	% 4-Fold Rise	% 2-Fold Rise	Responder
Communities of Color vs White Non-Hispanic	Positive	Placebo	Day 57	Anti Spike IgG (IU/ml)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Vaccine	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Placebo	Day 57	Pseudovirus-nAb ID50	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Vaccine	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)
Communities of Color vs White Non-Hispanic	Positive	Placebo	Day 57	Pseudovirus-nAb ID80	0 (0, 0)	0 (0, 0)	0 (0, 0)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

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

Table 11. Antibody levels in the baseline SARS-CoV-2 negative per-protocol cohort (vaccine vs. placebo)

Visit	Marker	Baseline SARS-CoV-2 Negative								
		Vaccine				Placebo				Comparison
		N	Resp rate	GMT/GMC	N	Resp rate	GMT/GMC	Resp Rate Difference	GMTR/GMCR	
Day 29	Anti N IgG (IU/ml)	756	10775.6/11182 = 96.4% (93.9%, 97.9%)	43.64 (36.28, 52.49)	124	0/11129 = 0.0% (0.0%, 0.0%)	0.05 (0.05, 0.05)	0.96 (0.94, 0.98)	931.06 (774.07, 1119.88)	
Day 29	Anti RBD IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	478.03 (411.95, 554.72)	124	0/11129 = 0.0% (0.0%, 0.0%)	0.80 (0.80, 0.80)	1 (1, 1)	599.93 (516.99, 696.17)	
Day 29	Anti Spike IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	307.44 (272.14, 347.33)	124	0/11129 = 0.0% (0.0%, 0.0%)	0.15 (0.15, 0.15)	1 (1, 1)	1998.97 (1769.42, 2258.31)	
Day 29	Pseudovirus-nAb ID50	756	11163.2/11182 = 99.8% (99.3%, 100.0%)	258.62 (237.59, 281.50)	124	0/11129 = 0.0% (0.0%, 0.0%)	5.03 (4.99, 5.08)	1 (0.99, 1)	51.39 (47.19, 55.96)	
Day 29	Pseudovirus-nAb ID80	756	10831.4/11182 = 96.9% (94.3%, 98.3%)	59.02 (54.61, 63.78)	124	45.7/11129 = 0.4% (0.1%, 2.9%)	5.07 (4.99, 5.15)	0.96 (0.93, 0.98)	11.65 (10.76, 12.61)	
Day 57	Anti N IgG (IU/ml)	756	11130.6/11182 = 99.5% (97.7%, 99.9%)	442.90 (356.61, 550.08)	124	0/11129 = 0.0% (0.0%, 0.0%)	0.05 (0.05, 0.05)	1 (0.98, 1)	9449.19 (7608.08, 11735.84)	
Day 57	Anti RBD IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	15525.12 (13089.55, 18413.87)	124	0/11129 = 0.0% (0.0%, 0.0%)	0.80 (0.80, 0.80)	1 (1, 1)	19483.75 (16427.15, 23109.09)	
Day 57	Anti Spike IgG (IU/ml)	756	11182/11182 = 100.0% (100.0%, 100.0%)	9083.71 (7831.59, 10536.04)	124	0/11129 = 0.0% (0.0%, 0.0%)	0.15 (0.15, 0.15)	1 (1, 1)	59061.86 (50920.58, 68504.79)	
Day 57	Pseudovirus-nAb ID50	756	11182/11182 = 100.0% (100.0%, 100.0%)	5826.31 (5396.16, 6290.75)	124	45.7/11129 = 0.4% (0.1%, 2.9%)	5.04 (4.98, 5.10)	1 (0.97, 1)	1156.10 (1069.80, 1249.37)	
Day 57	Pseudovirus-nAb ID80	756	11182/11182 = 100.0% (100.0%, 100.0%)	1338.84 (1244.61, 1440.20)	124	0/11129 = 0.0% (0.0%, 0.0%)	5.04 (4.99, 5.09)	1 (1, 1)	265.80 (246.92, 286.13)	

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

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

Table 12. Antibody levels in the baseline SARS-CoV-2 positive per-protocol cohort (vaccine vs. placebo)

Visit	Marker	Baseline SARS-CoV-2 Positive						Comparison	
		N	Resp rate	Vaccine GMT/GMC	N	Resp rate	Placebo GMT/GMC	Resp Rate Difference	GMTR/ GMCR
Day 29	Anti N IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	63.91 (47.18, 86.56)	228	1028.8/1061 = 97.0% (92.9%, 98.7%)	32.03 (23.64, 43.39)	0.03 (0.01, 0.07)	2.00 (1.30, 3.06)
Day 29	Anti RBD IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	810.65 (591.10, 1111.74)	228	1050.1/1061 = 99.0% (92.9%, 99.9%)	382.17 (291.58, 500.90)	0.01 (0, 0.07)	2.12 (1.40, 3.22)
Day 29	Anti Spike IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	417.37 (328.15, 530.85)	228	1061/1061 = 100.0% (100.0%, 100.0%)	175.33 (140.54, 218.73)	0 (0, 0)	2.38 (1.72, 3.30)
Day 29	Pseudovirus-nAb ID50	231	1148/1148 = 100.0% (100.0%, 100.0%)	414.35 (361.56, 474.85)	228	1061/1061 = 100.0% (100.0%, 100.0%)	179.81 (157.59, 205.16)	0 (0, 0)	2.30 (1.91, 2.79)
Day 29	Pseudovirus-nAb ID80	231	1141.5/1148 = 99.4% (97.7%, 99.9%)	95.76 (85.02, 107.86)	228	977.9/1061 = 92.2% (85.6%, 95.9%)	40.53 (35.93, 45.72)	0.07 (0.03, 0.14)	2.36 (1.99, 2.80)
Day 57	Anti N IgG (IU/ml)	231	1145/1148 = 99.7% (98.1%, 100.0%)	1033.97 (697.29, 1533.23)	228	1057.8/1061 = 99.7% (97.9%, 100.0%)	346.46 (241.30, 497.44)	0 (-0.02, 0.02)	2.98 (1.75, 5.09)
Day 57	Anti RBD IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	34994.74 (26856.69, 45598.75)	228	1061/1061 = 100.0% (100.0%, 100.0%)	10781.25 (7871.72, 14766.19)	0 (0, 0)	3.25 (2.15, 4.90)
Day 57	Anti Spike IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	25909.49 (19949.97, 33649.26)	228	1061/1061 = 100.0% (100.0%, 100.0%)	7223.90 (5651.04, 9234.54)	0 (0, 0)	3.59 (2.51, 5.13)
Day 57	Pseudovirus-nAb ID50	231	1148/1148 = 100.0% (100.0%, 100.0%)	14829.72 (12948.92, 16983.72)	228	1061/1061 = 100.0% (100.0%, 100.0%)	4475.50 (3810.59, 5256.43)	0 (0, 0)	3.31 (2.68, 4.09)
Day 57	Pseudovirus-nAb ID80	231	1148/1148 = 100.0% (100.0%, 100.0%)	3003.67 (2625.21, 3436.68)	228	1061/1061 = 100.0% (100.0%, 100.0%)	1062.31 (942.02, 1197.95)	0 (0, 0)	2.83 (2.36, 3.39)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

1.13 Antibody levels in the per-protocol cohort (vaccine recipients)

Table 13. 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)	231	1148/1148 = 100.0% (100.0%, 100.0%)	63.91 (47.18, 86.56)	756	10775.6/11182 = 96.4% (93.9%, 97.9%)	43.64 (36.28, 52.49)	0.04 (0.02, 0.06)	1.46 (1.03, 2.09)
Day 29	Anti RBD IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	810.65 (591.10, 1111.74)	756	11182/11182 = 100.0% (100.0%, 100.0%)	478.03 (411.95, 554.72)	0 (0, 0)	1.70 (1.20, 2.40)
Day 29	Anti Spike IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	417.37 (328.15, 530.85)	756	11182/11182 = 100.0% (100.0%, 100.0%)	307.44 (272.14, 347.33)	0 (0, 0)	1.36 (1.04, 1.78)
Day 29	Pseudovirus-nAb ID50	231	1148/1148 = 100.0% (100.0%, 100.0%)	414.35 (361.56, 474.85)	756	11163.2/11182 = 99.8% (99.3%, 100.0%)	258.62 (237.59, 281.50)	0 (0, 0.01)	1.60 (1.36, 1.88)
Day 29	Pseudovirus-nAb ID80	231	1141.5/1148 = 99.4% (97.7%, 99.9%)	95.76 (85.02, 107.86)	756	10831.4/11182 = 96.9% (94.3%, 98.3%)	59.02 (54.61, 63.78)	0.03 (0, 0.05)	1.62 (1.41, 1.87)
Day 57	Anti N IgG (IU/ml)	231	1145/1148 = 99.7% (98.1%, 100.0%)	1033.97 (697.29, 1533.23)	756	11130.6/11182 = 99.5% (97.7%, 99.9%)	442.90 (356.61, 550.08)	0 (-0.01, 0.02)	2.33 (1.49, 3.66)
Day 57	Anti RBD IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	34994.74 (26856.69, 45598.75)	756	11182/11182 = 100.0% (100.0%, 100.0%)	15525.12 (13089.55, 18413.87)	0 (0, 0)	2.25 (1.65, 3.09)
Day 57	Anti Spike IgG (IU/ml)	231	1148/1148 = 100.0% (100.0%, 100.0%)	25909.49 (19949.97, 33649.26)	756	11182/11182 = 100.0% (100.0%, 100.0%)	9083.71 (7831.59, 10536.04)	0 (0, 0)	2.85 (2.11, 3.85)
Day 57	Pseudovirus-nAb ID50	231	1148/1148 = 100.0% (100.0%, 100.0%)	14829.72 (12948.92, 16983.72)	756	11182/11182 = 100.0% (100.0%, 100.0%)	5826.31 (5396.16, 6290.75)	0 (0, 0)	2.55 (2.18, 2.97)
Day 57	Pseudovirus-nAb ID80	231	1148/1148 = 100.0% (100.0%, 100.0%)	3003.67 (2625.21, 3436.68)	756	11182/11182 = 100.0% (100.0%, 100.0%)	1338.84 (1244.61, 1440.20)	0 (0, 0)	2.24 (1.92, 2.61)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

1.14 Antibody levels in the per-protocol cohort (placebo recipients)

Table 14. Antibody levels in the per-protocol cohort (placebo recipients)

Visit	Marker	N	Placebo Recipients			Comparison			
			Baseline SARS-CoV-2 Positive		Baseline SARS-CoV-2 Negative		Comparison		
Day 29	Anti N IgG (IU/ml)	228	1028.8/1061 = 97.0% (92.9%, 98.7%)	32.03 (23.64, 43.39)	124	0/1129 = 0.0% (0.0%, 0.0%)	0.05 (0.05, 0.05)	0.97 (0.93, 0.99)	683.33 (504.45, 925.65)
Day 29	Anti RBD IgG (IU/ml)	228	1050.1/1061 = 99.0% (92.9%, 99.9%)	382.17 (291.58, 500.90)	124	0/1129 = 0.0% (0.0%, 0.0%)	0.80 (0.80, 0.80)	0.99 (0.93, 1)	479.61 (365.93, 628.62)
Day 29	Anti Spike IgG (IU/ml)	228	1061/1061 = 100.0% (100.0%, 100.0%)	175.33 (140.54, 218.73)	124	0/1129 = 0.0% (0.0%, 0.0%)	0.15 (0.15, 0.15)	1 (1, 1)	1139.98 (913.77, 1422.19)
Day 29	Pseudovirus-nAb ID50	228	1061/1061 = 100.0% (100.0%, 100.0%)	179.81 (157.59, 205.16)	124	0/1129 = 0.0% (0.0%, 0.0%)	5.03 (4.99, 5.08)	1 (1, 1)	35.73 (31.30, 40.78)
Day 29	Pseudovirus-nAb ID80	228	977.9/1061 = 92.2% (85.6%, 95.9%)	40.53 (35.93, 45.72)	124	45.7/11129 = 0.4% (0.1%, 2.9%)	5.07 (4.99, 5.15)	0.92 (0.85, 0.95)	8.00 (7.08, 9.03)
Day 57	Anti N IgG (IU/ml)	228	1057.8/1061 = 99.7% (97.9%, 100.0%)	346.46 (241.30, 497.44)	124	0/1129 = 0.0% (0.0%, 0.0%)	0.05 (0.05, 0.05)	1 (0.98, 1)	7391.55 (5148.11, 10612.63)
Day 57	Anti RBD IgG (IU/ml)	228	1061/1061 = 100.0% (100.0%, 100.0%)	10781.25 (7871.72, 14766.19)	124	0/1129 = 0.0% (0.0%, 0.0%)	0.80 (0.80, 0.80)	1 (1, 1)	13530.27 (9878.86, 18531.31)
Day 57	Anti Spike IgG (IU/ml)	228	1061/1061 = 100.0% (100.0%, 100.0%)	7223.90 (5651.04, 9234.54)	124	0/1129 = 0.0% (0.0%, 0.0%)	0.15 (0.15, 0.15)	1 (1, 1)	46969.45 (36742.79, 60042.51)
Day 57	Pseudovirus-nAb ID50	228	1061/1061 = 100.0% (100.0%, 100.0%)	4475.50 (3810.59, 5256.43)	124	45.7/11129 = 0.4% (0.1%, 2.9%)	5.04 (4.98, 5.10)	1 (0.97, 1)	888.06 (755.81, 1043.46)
Day 57	Pseudovirus-nAb ID80	228	1061/1061 = 100.0% (100.0%, 100.0%)	1062.31 (942.02, 1197.95)	124	0/1129 = 0.0% (0.0%, 0.0%)	5.04 (4.99, 5.09)	1 (1, 1)	210.90 (186.94, 237.94)

Percentages are calculated for the whole per-protocol group/subgroup, using inverse probability weighting.

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

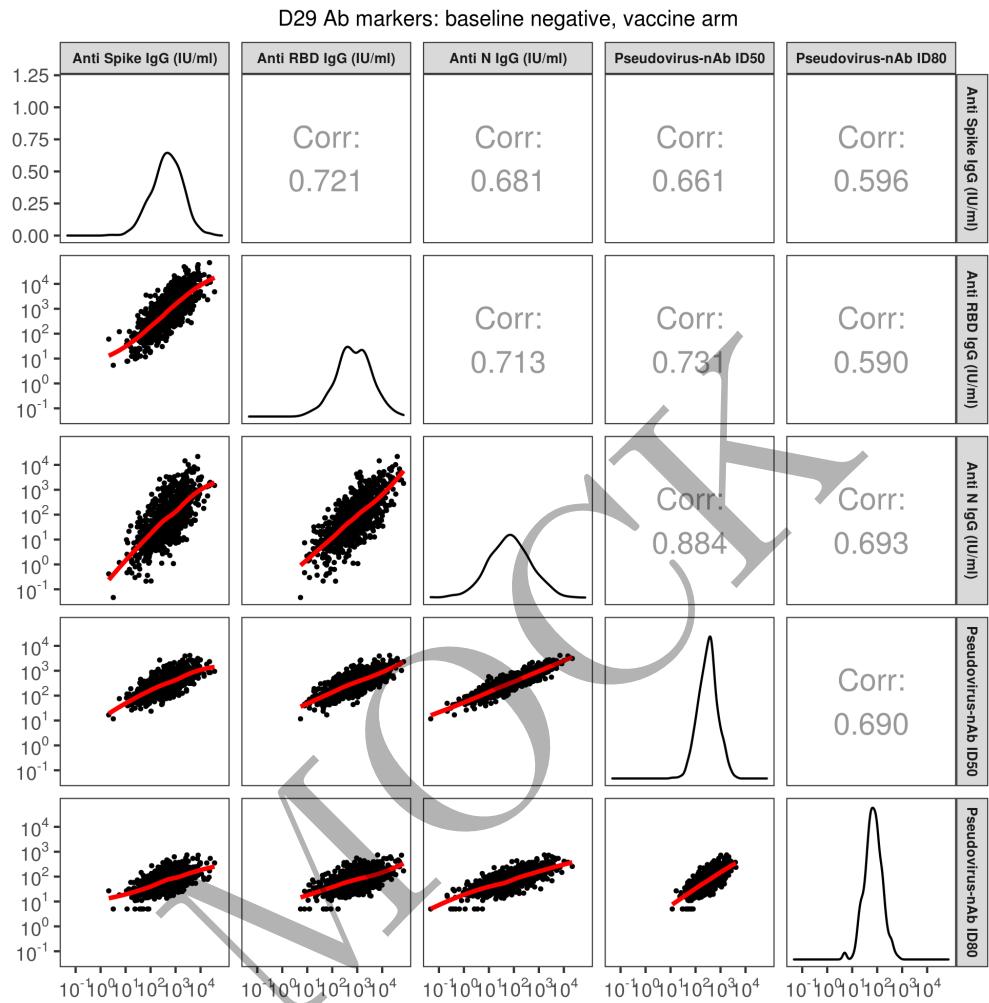


Figure 2.1: Pair plots of D29 Ab markers: baseline negative vaccine arm

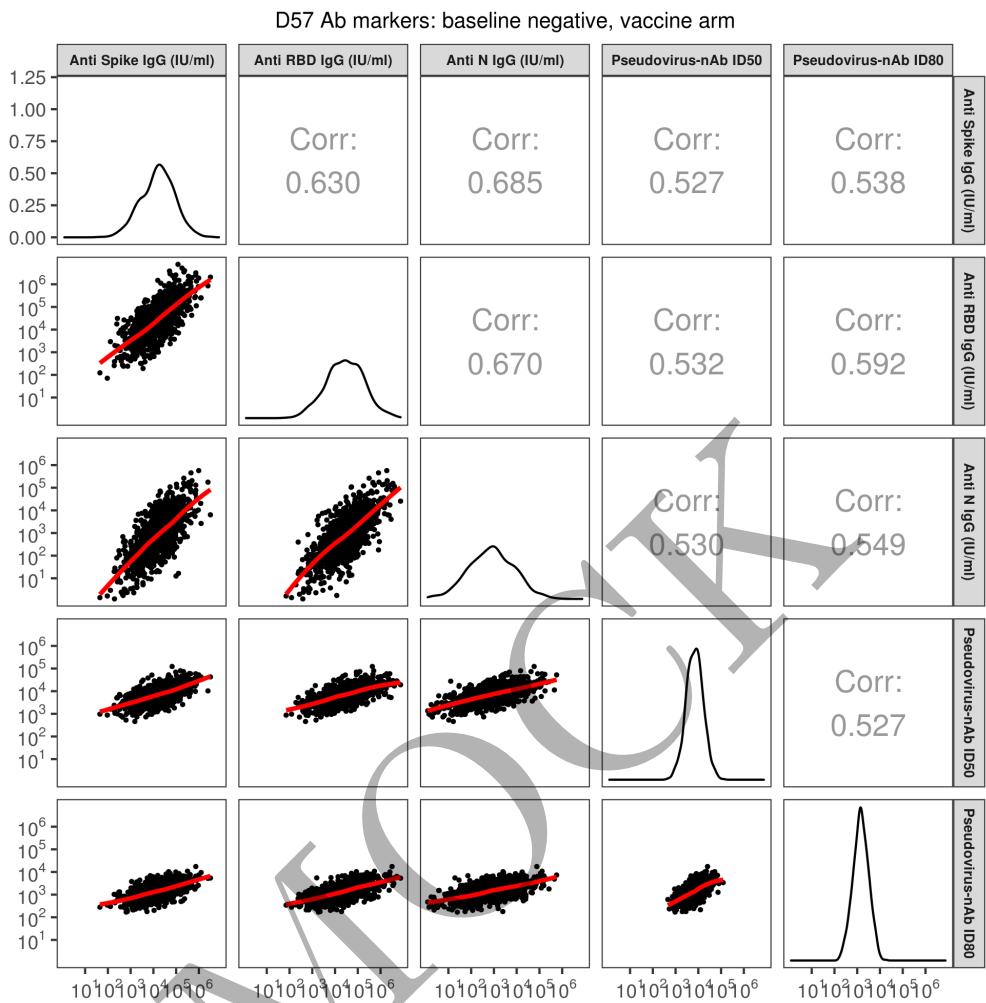


Figure 2.2: Pair plots of D57 Ab markers: baseline negative vaccine arm

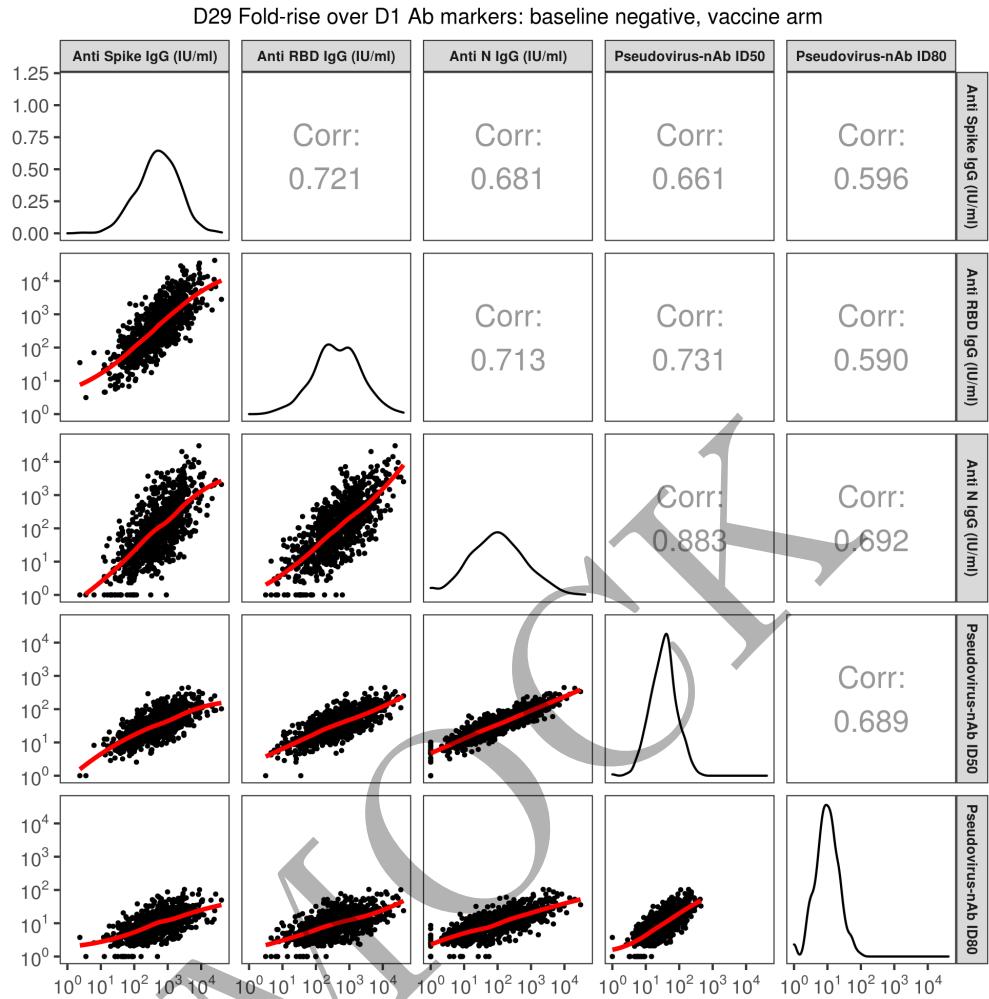


Figure 2.3: Pair plots of D29 fold-rise over D1 Ab markers: baseline negative vaccine arm

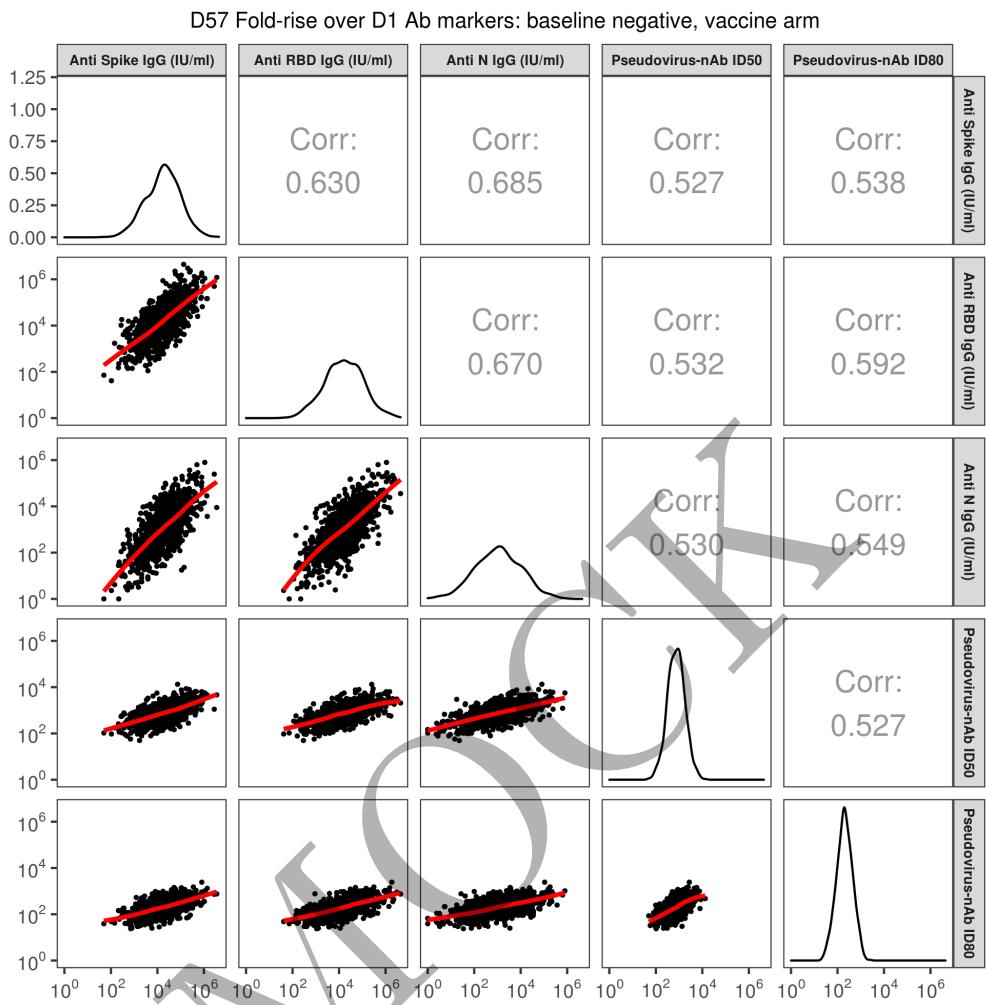


Figure 2.4: Pair plots of D57 fold-rise over D1 Ab markers: baseline negative vaccine arm

Binding Antibody to N: baseline negative vaccine arm

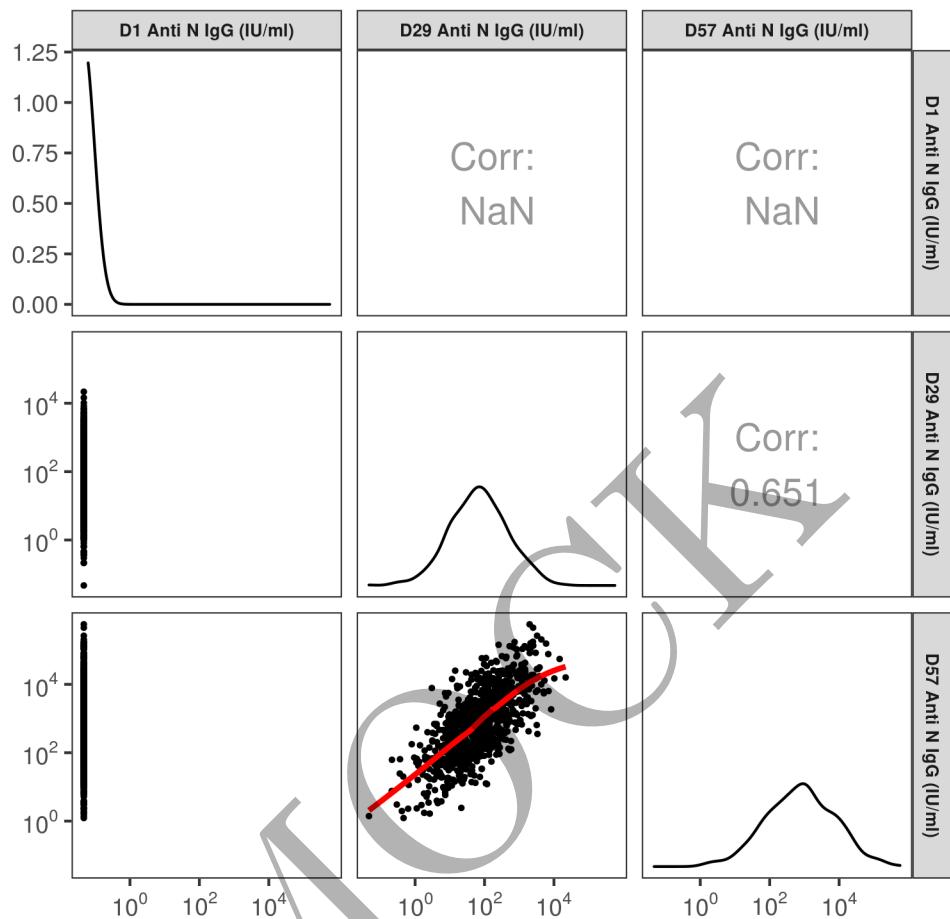


Figure 2.5: Pair plots of D1, D29 and D57 Binding Antibody to N: baseline negative vaccine arm

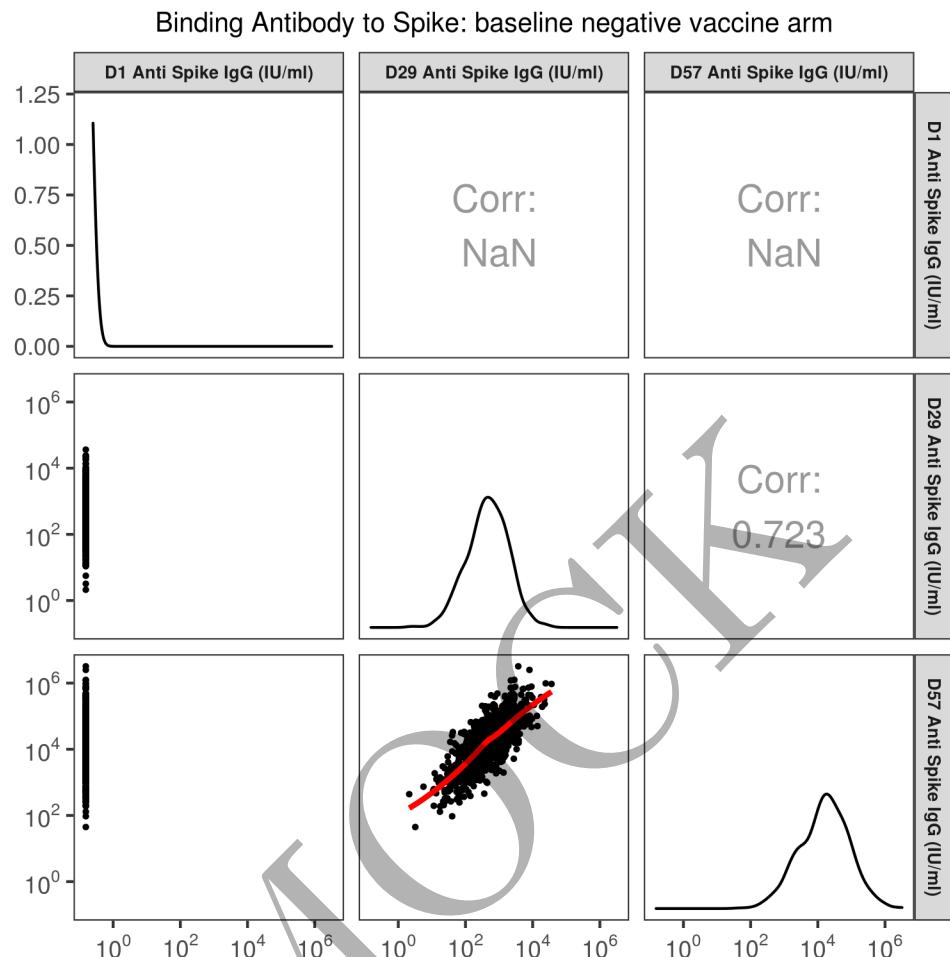


Figure 2.6: Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline negative vaccine arm

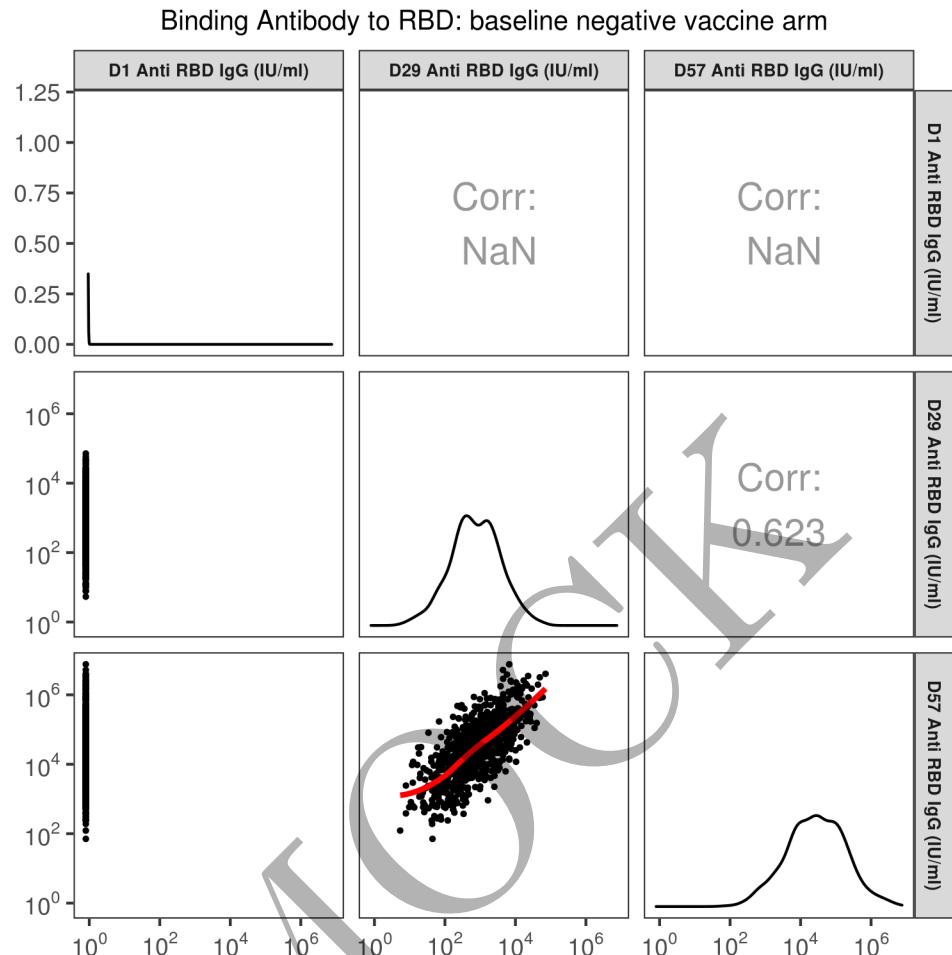


Figure 2.7: Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative vaccine arm

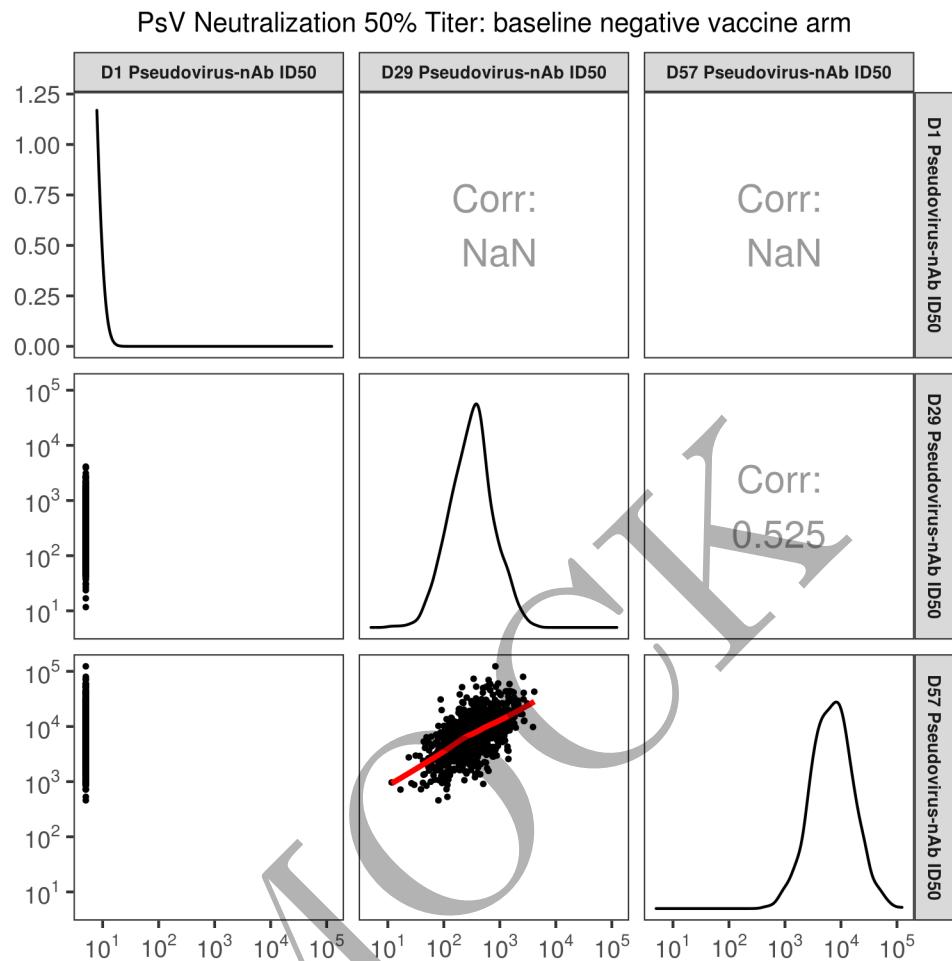


Figure 2.8: Pair plots of D1, D29 and D57 nAb Neutralization 50% Titer: baseline negative vaccine arm

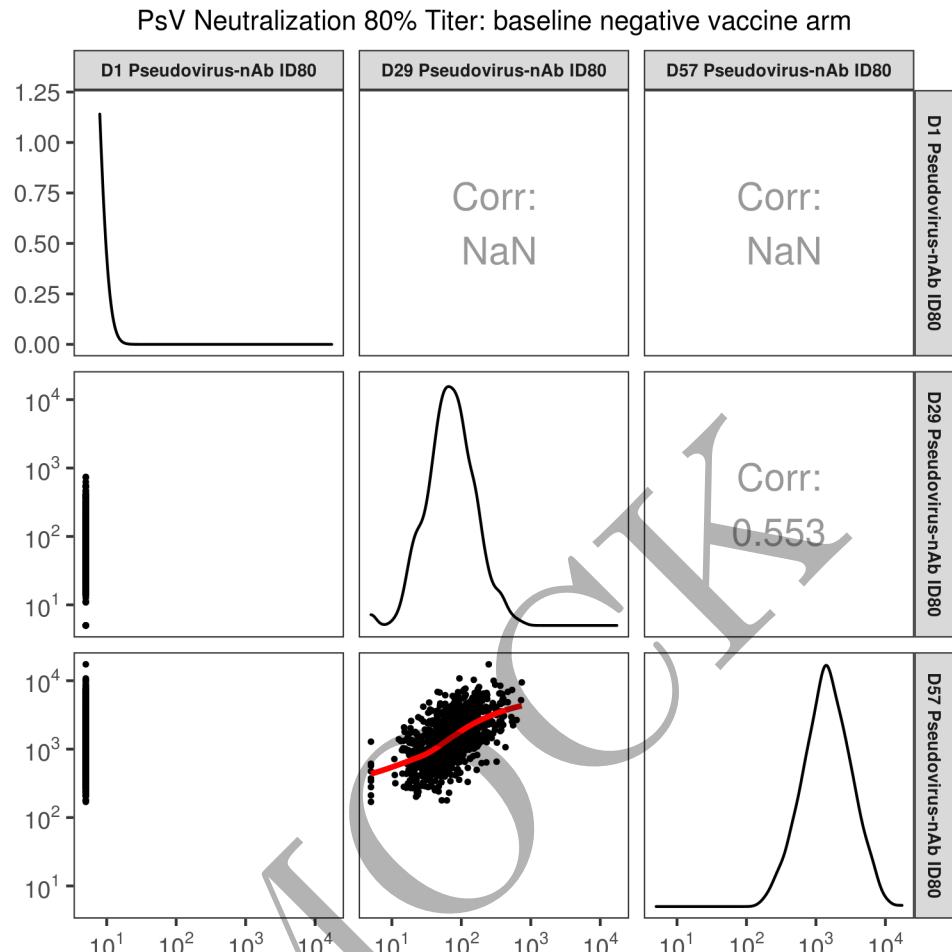


Figure 2.9: Pair plots of D1, D29 and D57 nAb Neutralization 80% Titer: Baseline negative vaccine arm

2.1.2 Baseline SARS-CoV-2 Positive

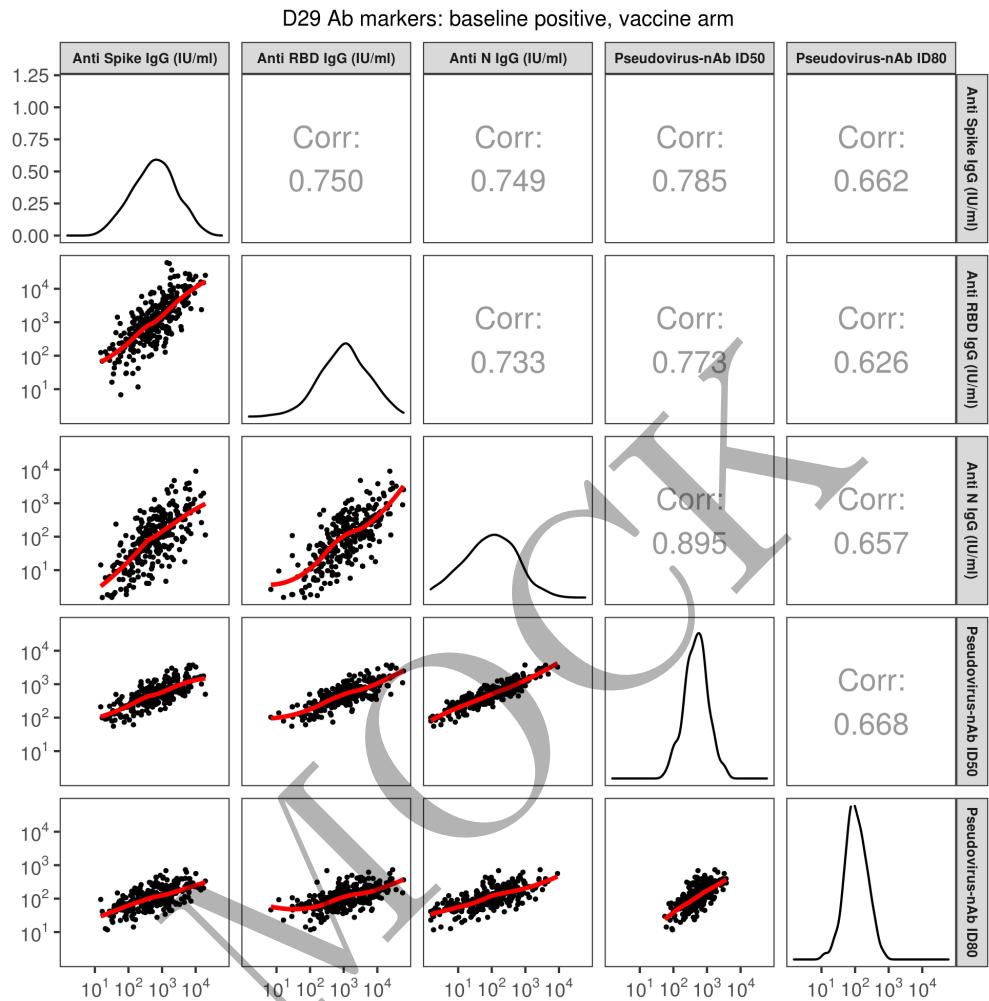


Figure 2.10: Pair plots of D29 Ab markers: baseline positive vaccine arm

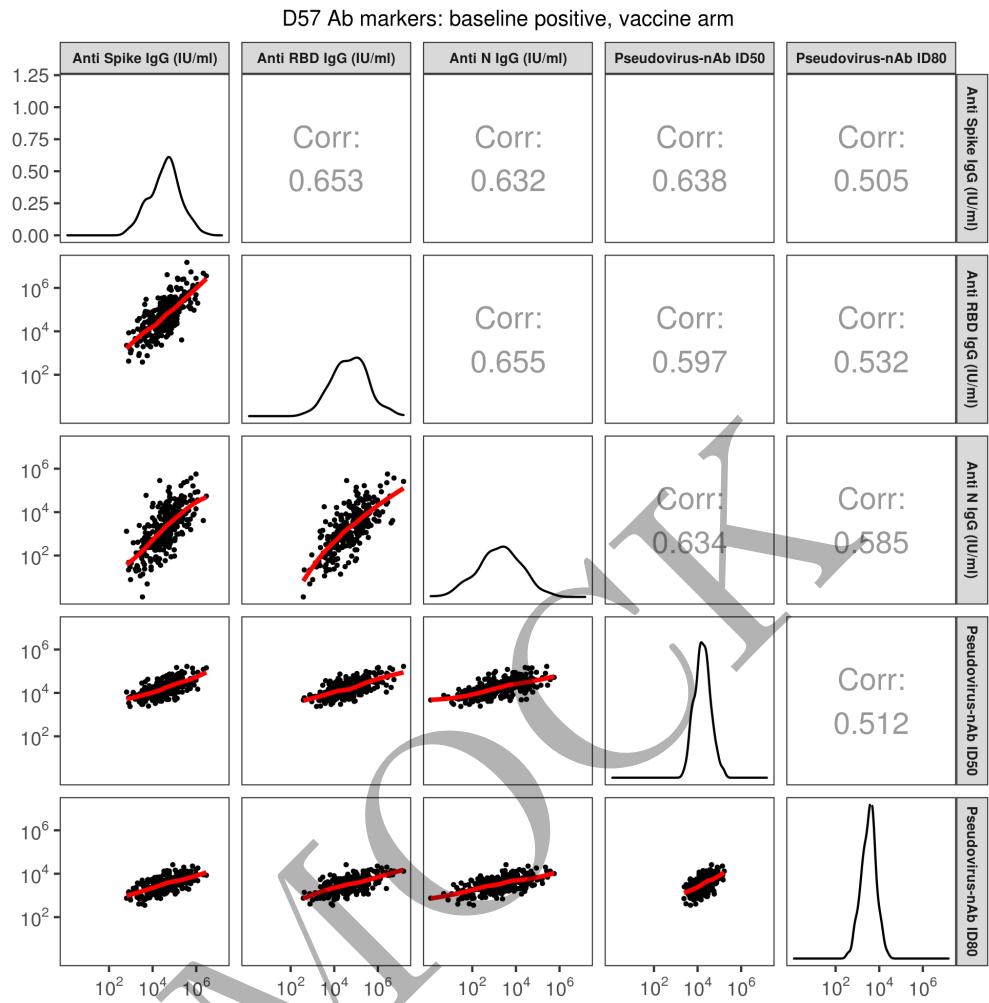


Figure 2.11: Pair plots of D57 Ab markers: baseline positive vaccine arm

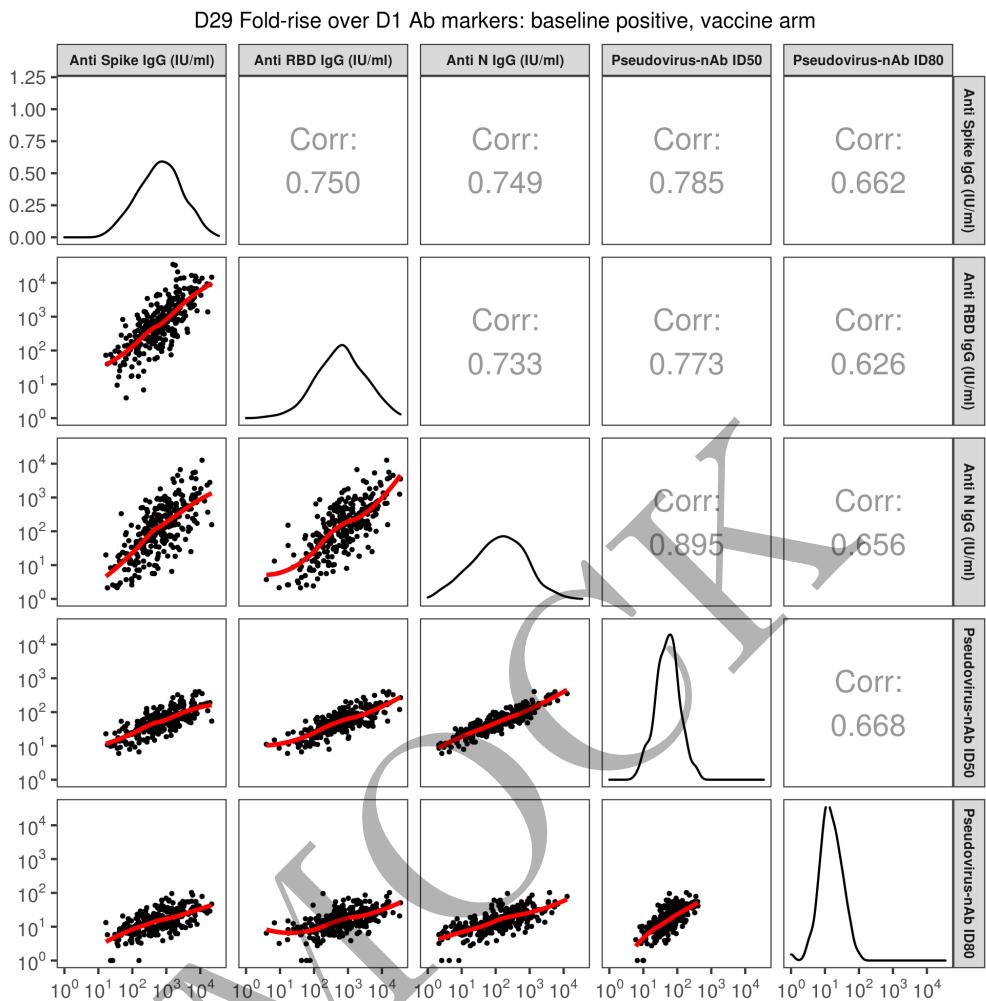


Figure 2.12: Pair plots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm

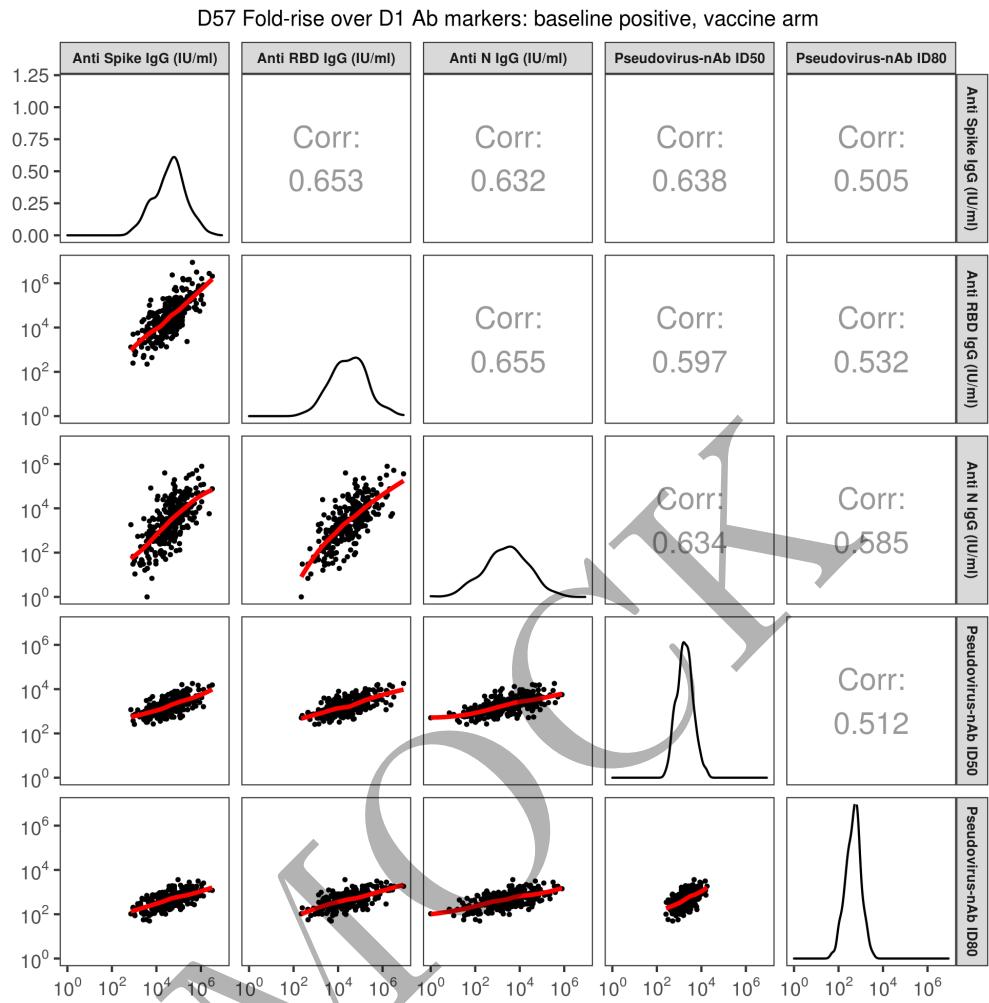


Figure 2.13: Pair plots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm

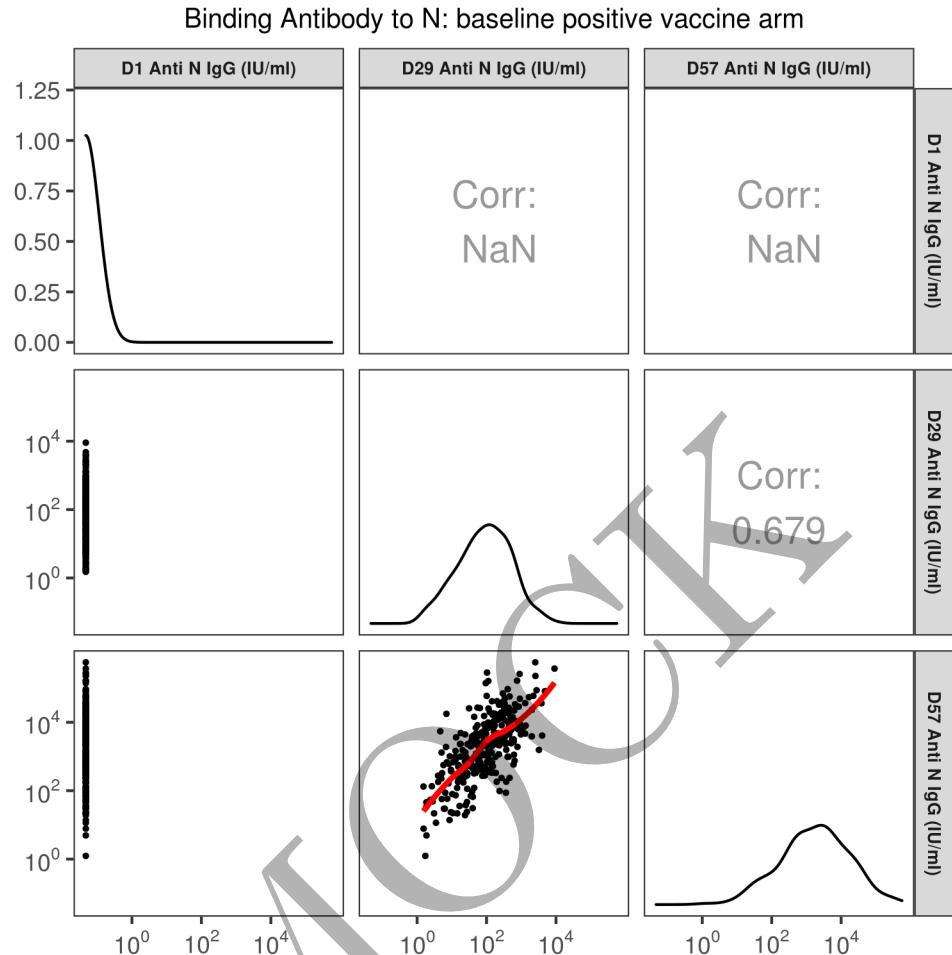


Figure 2.14: Pair plots of D1, D29 and D57 Binding Antibody to N: baseline positive vaccine arm

Binding Antibody to Spike: baseline positive vaccine arm

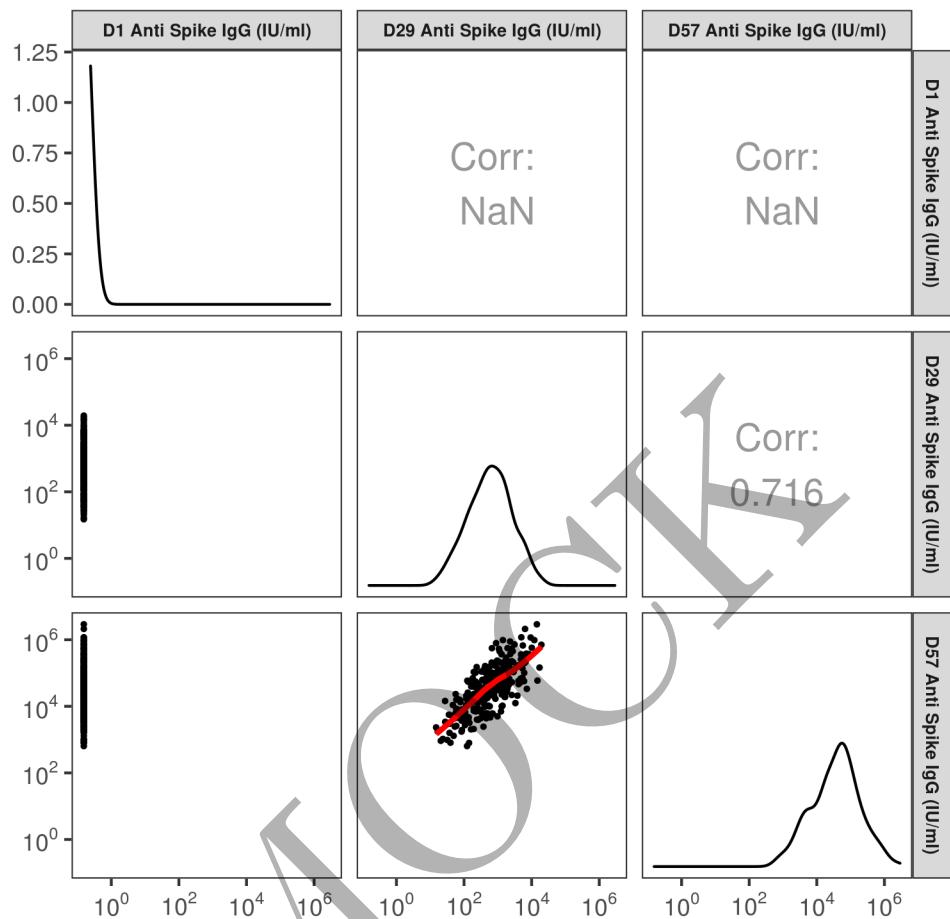


Figure 2.15: Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline positive vaccine arm

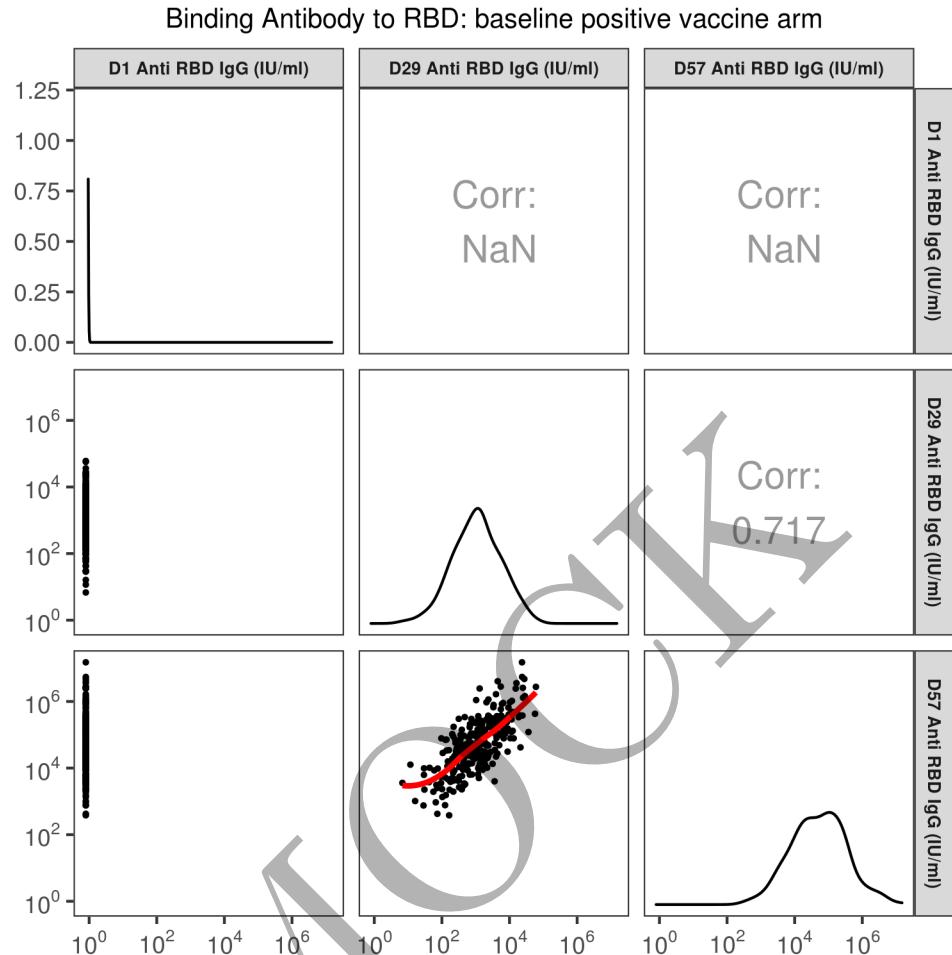


Figure 2.16: Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline positive vaccine arm

PsV Neutralization 50% Titer: baseline positive vaccine arm

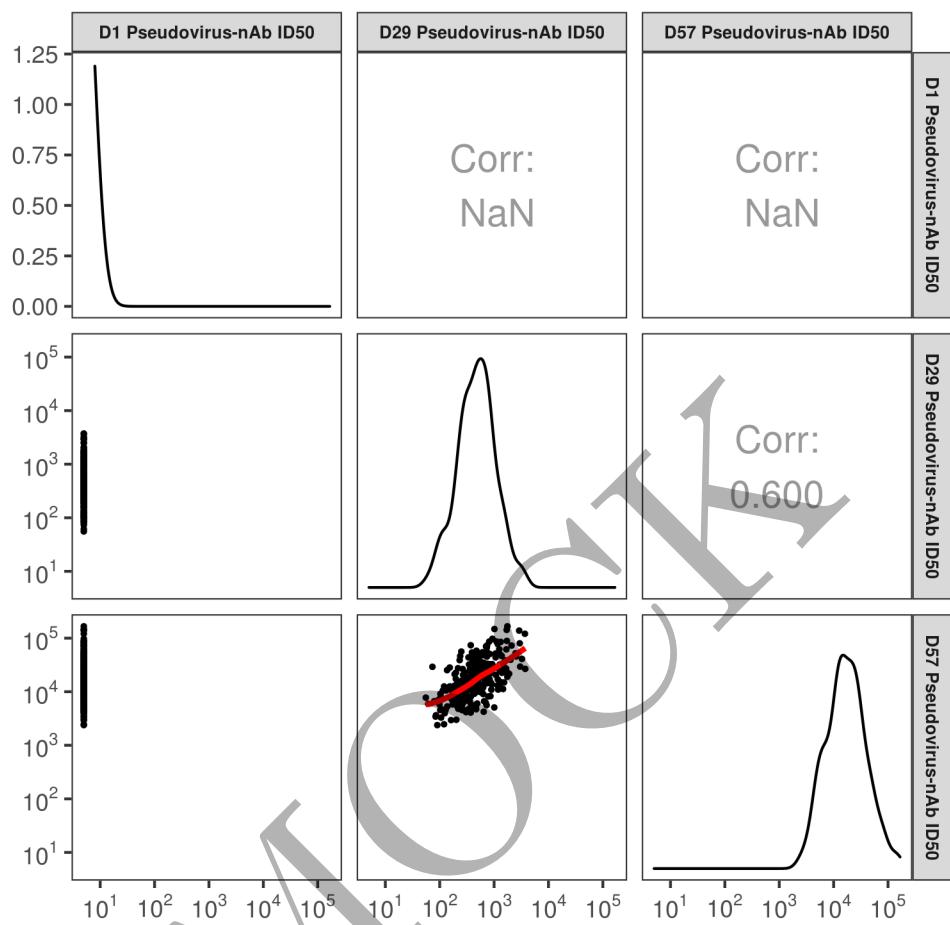


Figure 2.17: Pair plots of D1, D29 and D57 nAb Neutralization 50% Titer: baseline positive vaccine arm

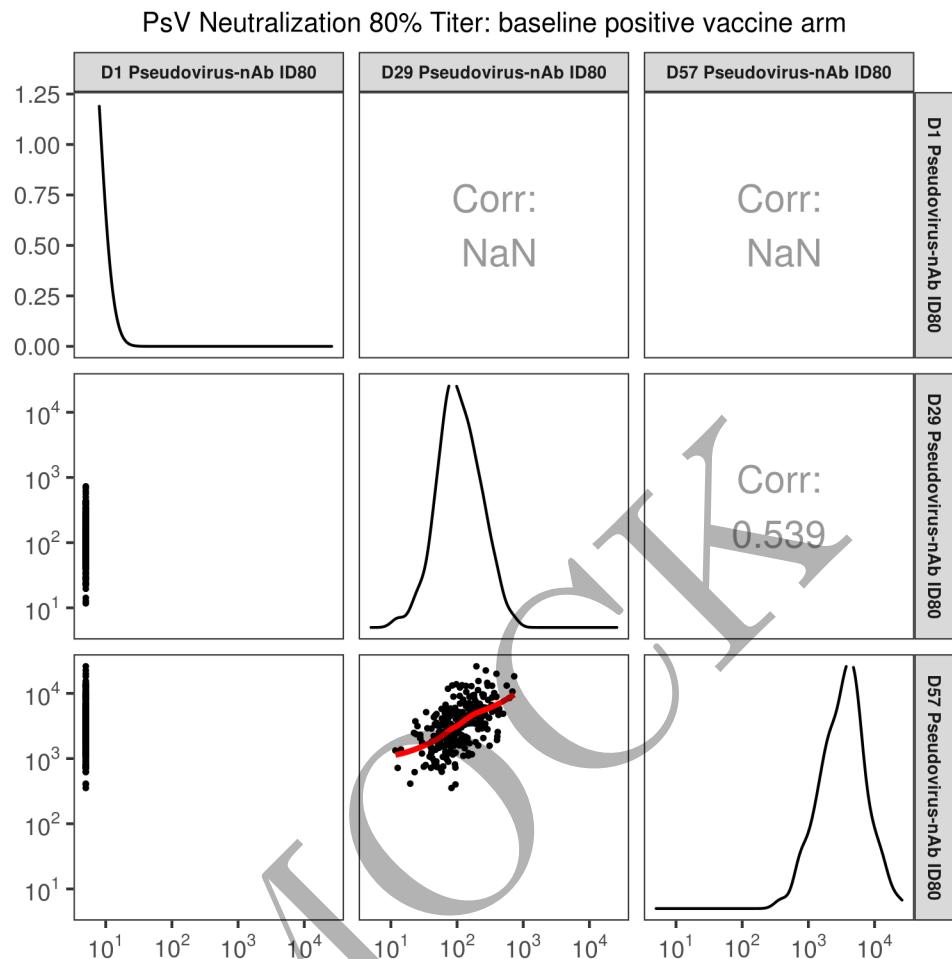


Figure 2.18: Pair plots of D1, D29 and D57 nAb Neutralization 80% Titer: Baseline positive vaccine arm

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

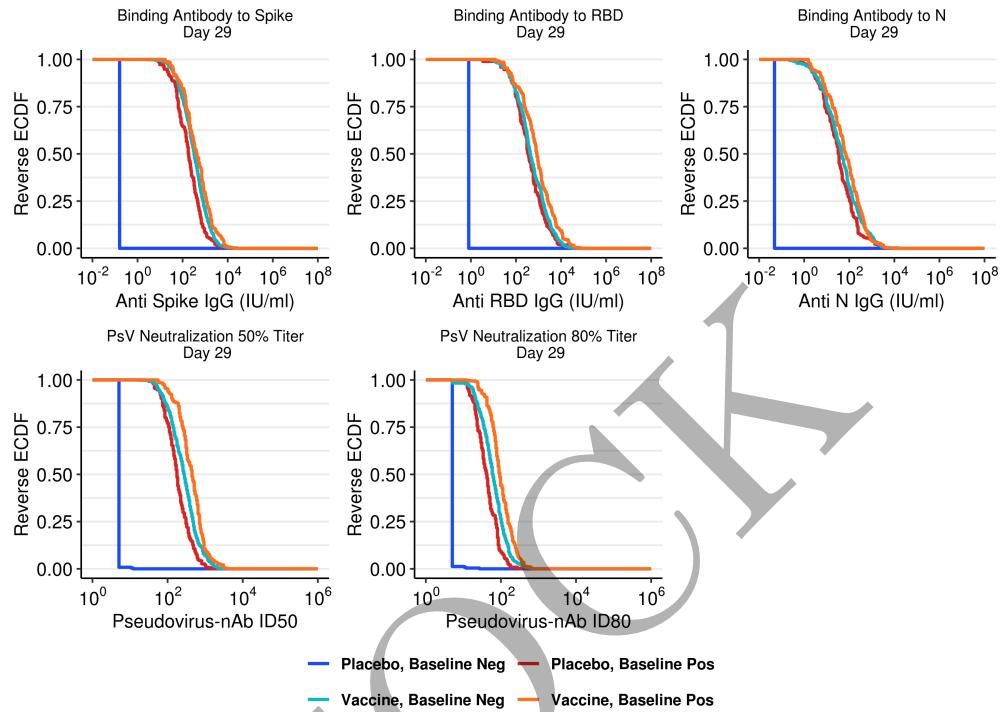


Figure 2.19: RCDF plots for D29 Ab markers: by baseline status x randomization arm

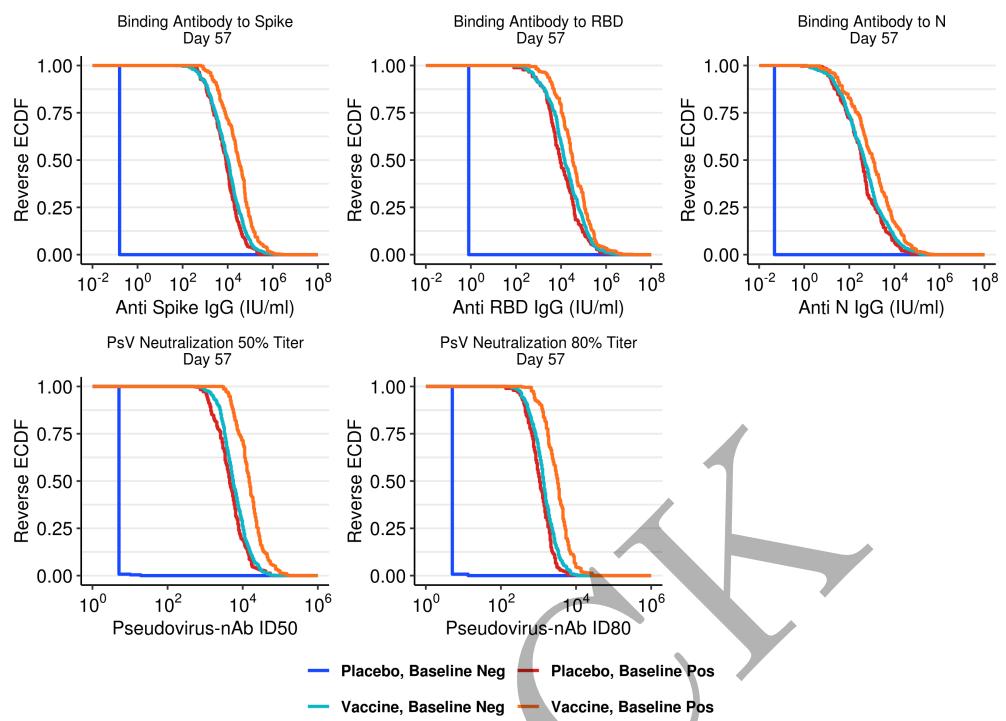


Figure 2.20: RCDF plots for D57 Ab markers: by baseline status x randomization arm

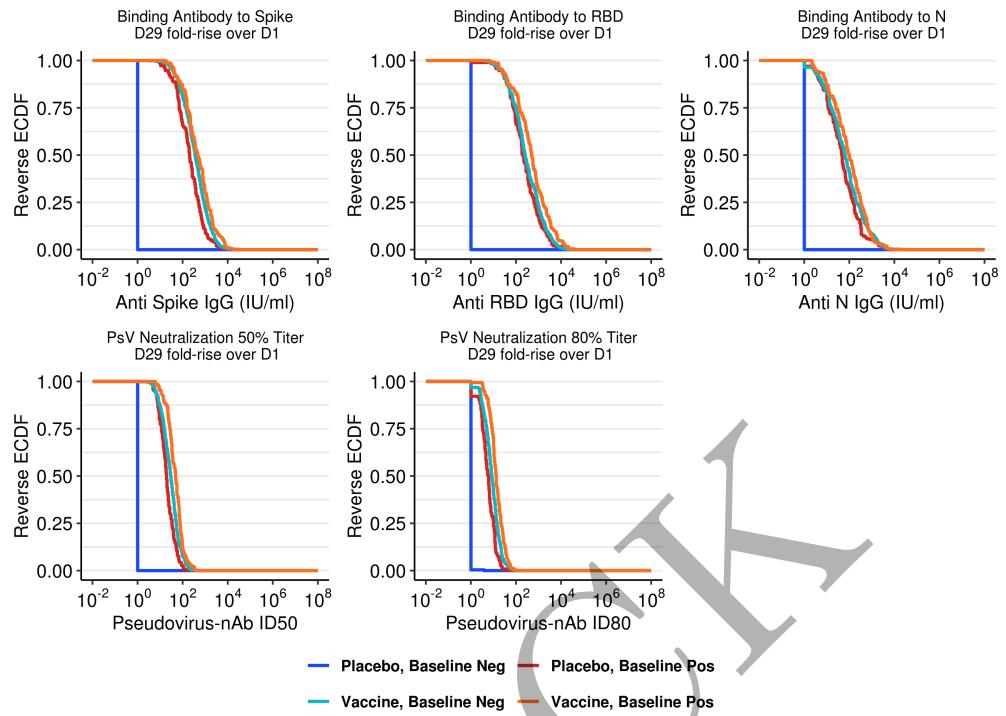


Figure 2.21: RCDF plots for D29 fold-rise over D1 Ab markers: by baseline status x randomization arm

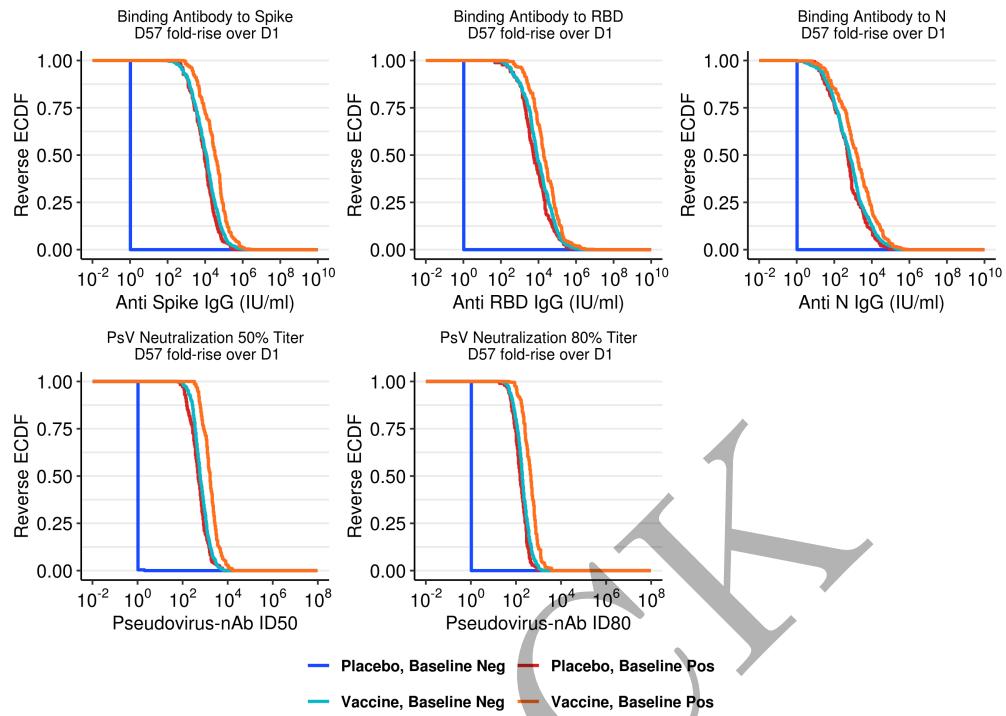


Figure 2.22: RCDF plots for D57 fold-rise over D1 Ab markers: by baseline status x randomization arm

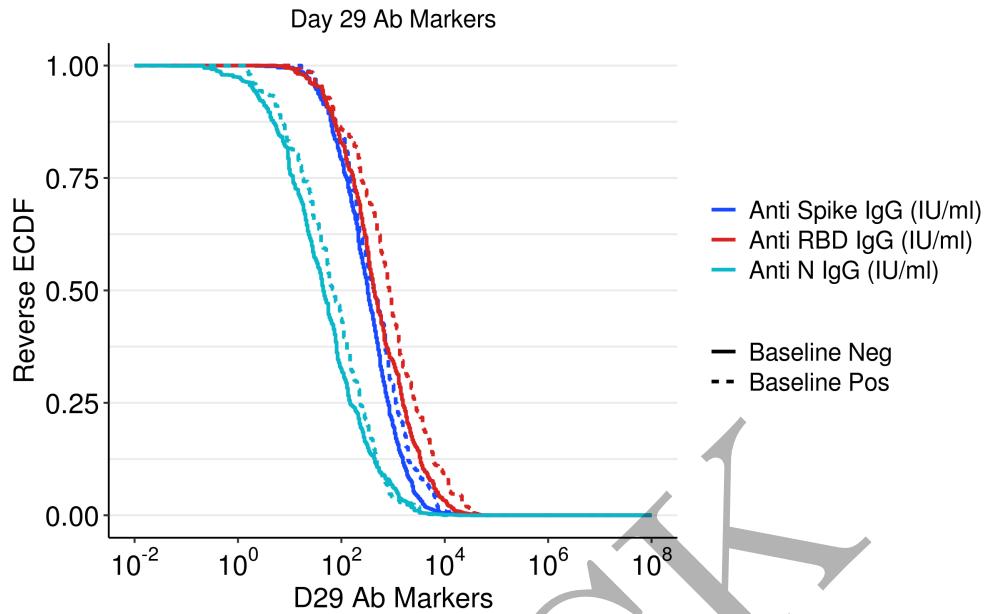


Figure 2.23: RCDF plots for D29 bAb markers: by baseline status for the vaccine arm

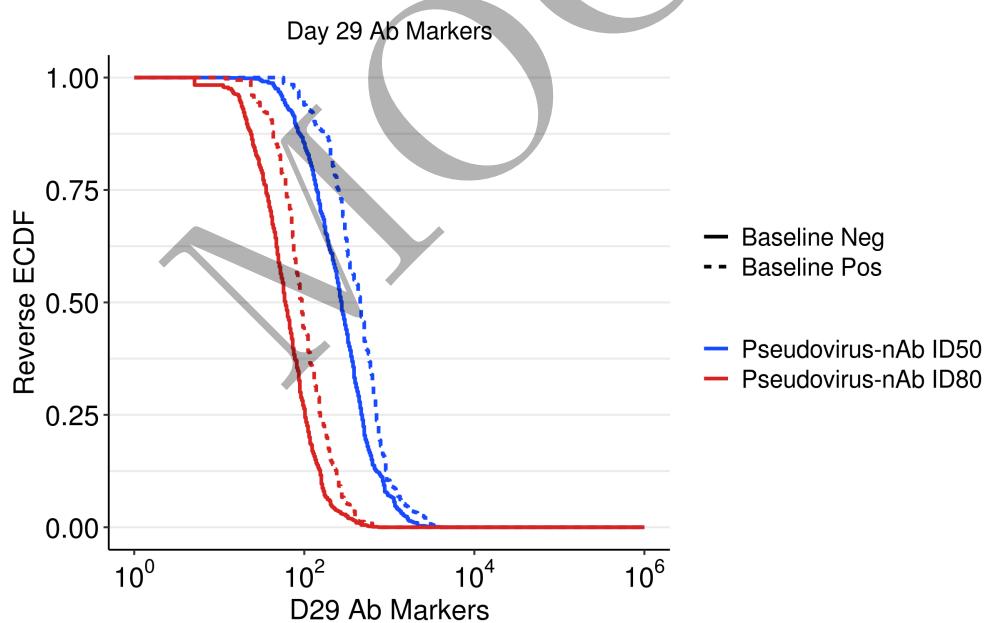


Figure 2.24: RCDF plots for D29 nAb markers: by baseline status for the vaccine arm

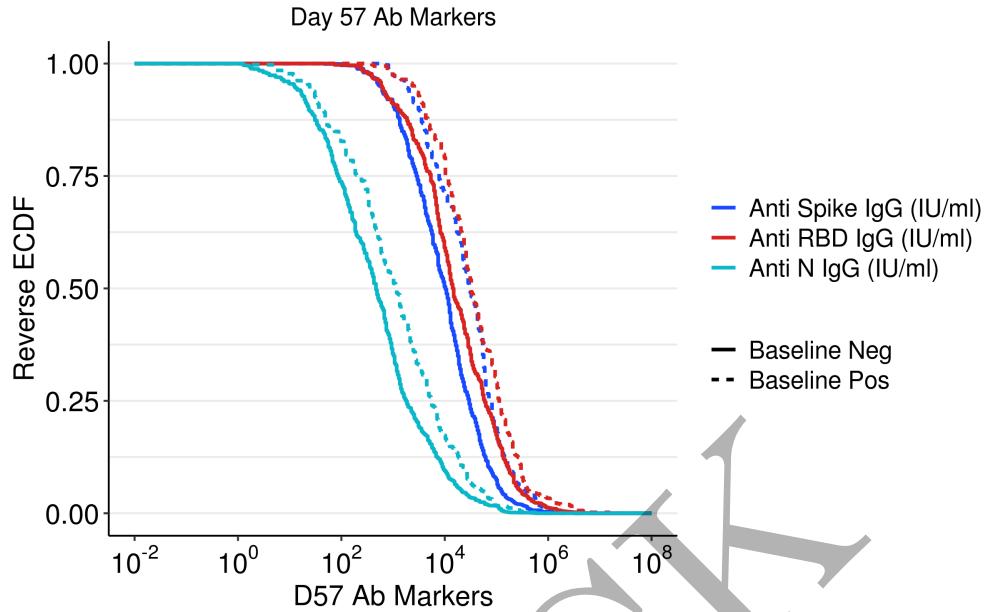


Figure 2.25: RCDF plots for D57 bAb markers: by baseline status for the vaccine arm

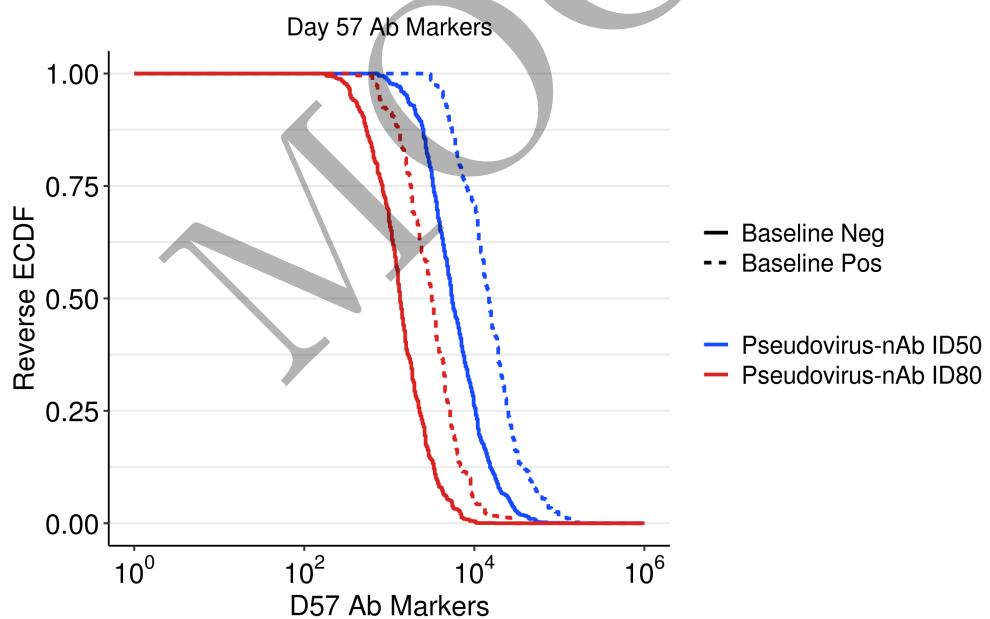


Figure 2.26: RCDF plots for D57 nAb markers: by baseline status for the vaccine arm

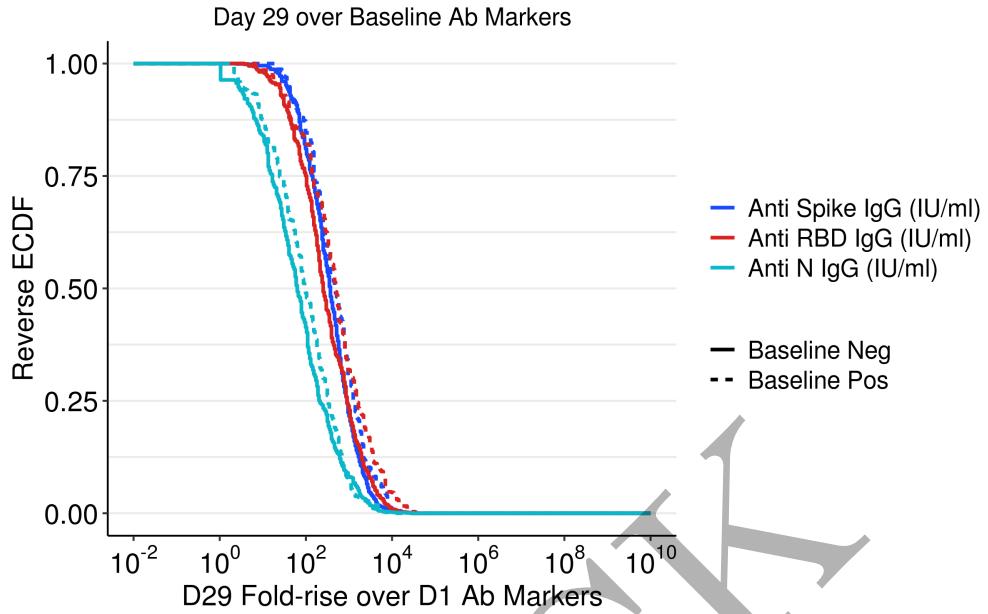


Figure 2.27: RCDF plots for D29 over D1 fold-rise bAb markers: by baseline status for the vaccine arm

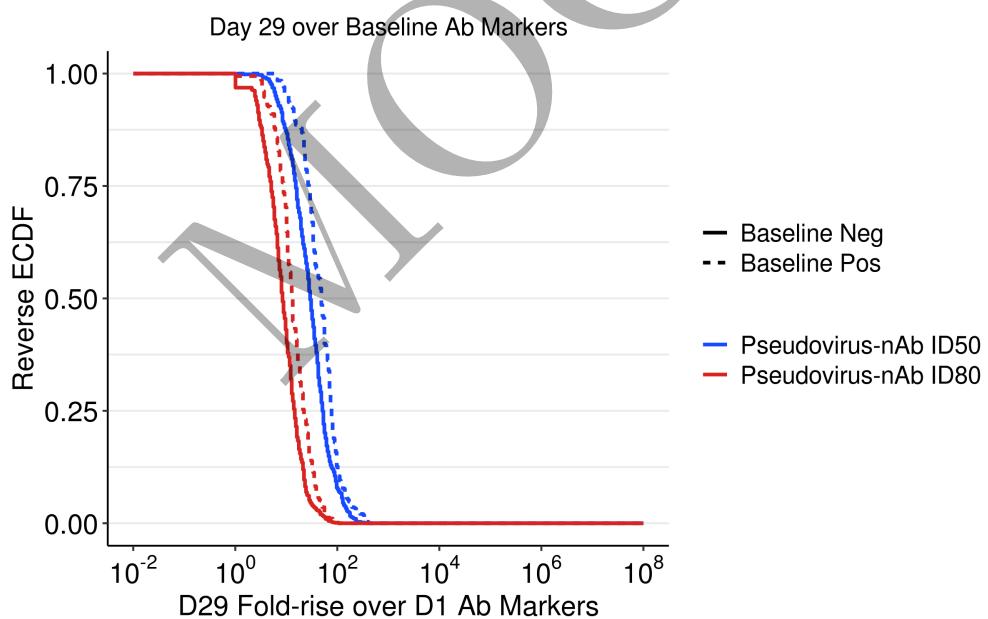


Figure 2.28: RCDF plots for D29 over D1 fold-rise nAb markers: by baseline status for the vaccine arm

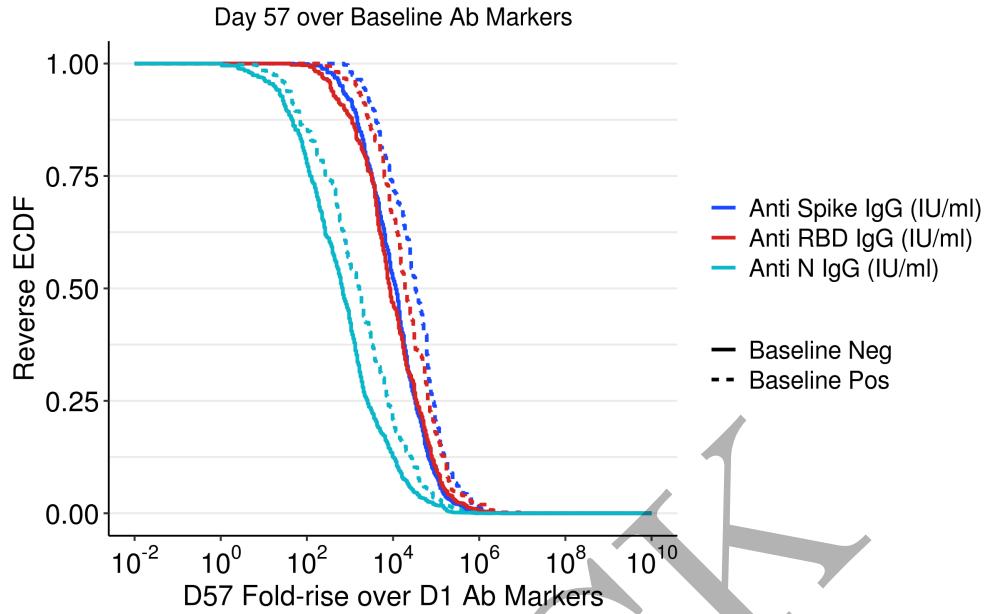


Figure 2.29: RCDF plots for D57 fold-rise over D1 bAb markers: by baseline status for the vaccine arm

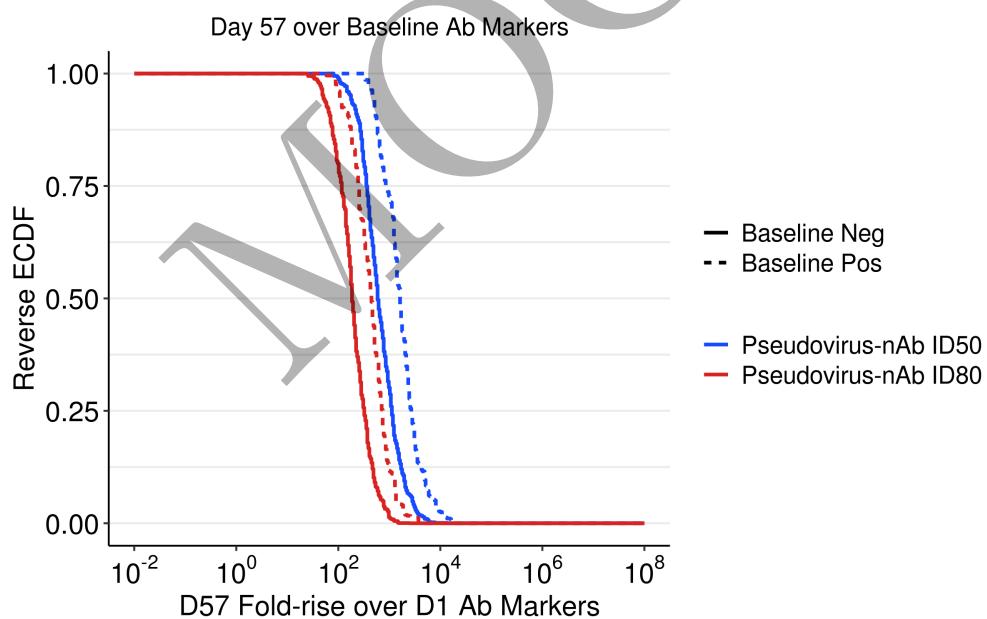


Figure 2.30: RCDF plots for D57 fold-rise over D1 nAb markers: by baseline status for the vaccine arm

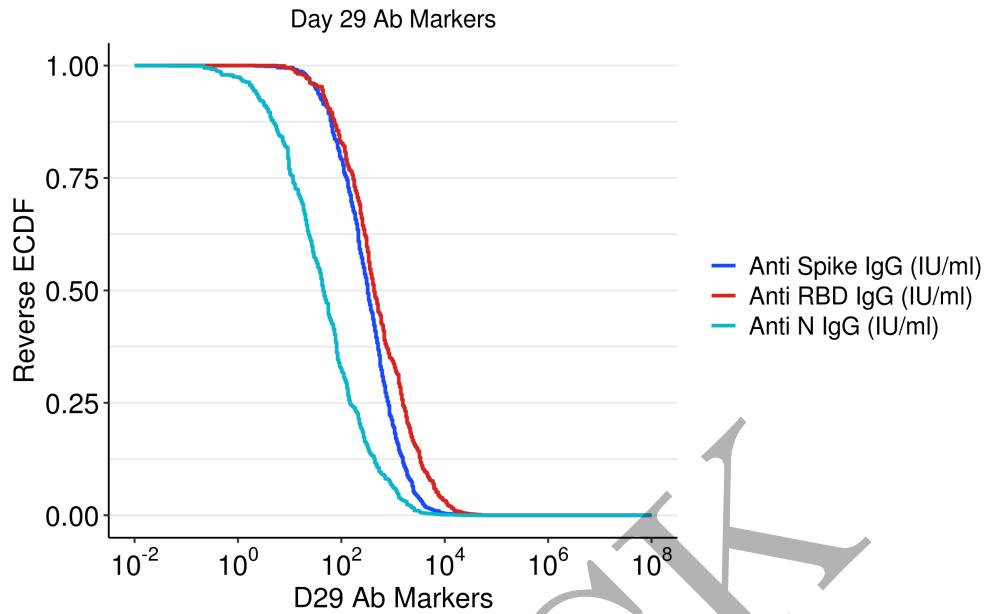


Figure 2.31: RCDF plots for D29 bAb markers: baseline negative vaccine arm

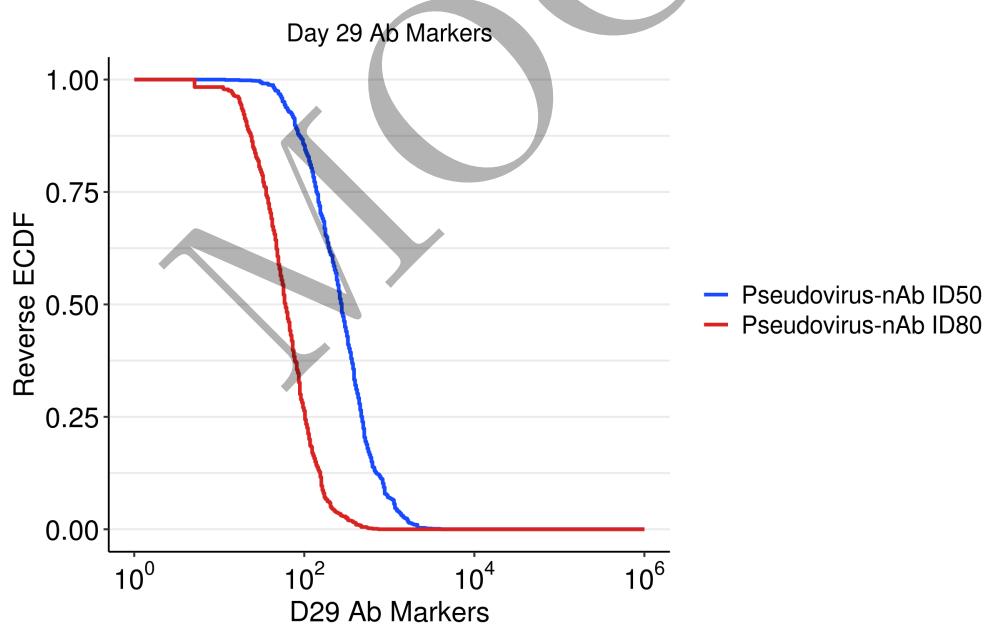


Figure 2.32: RCDF plots for D29 nAb markers: baseline negative vaccine arm

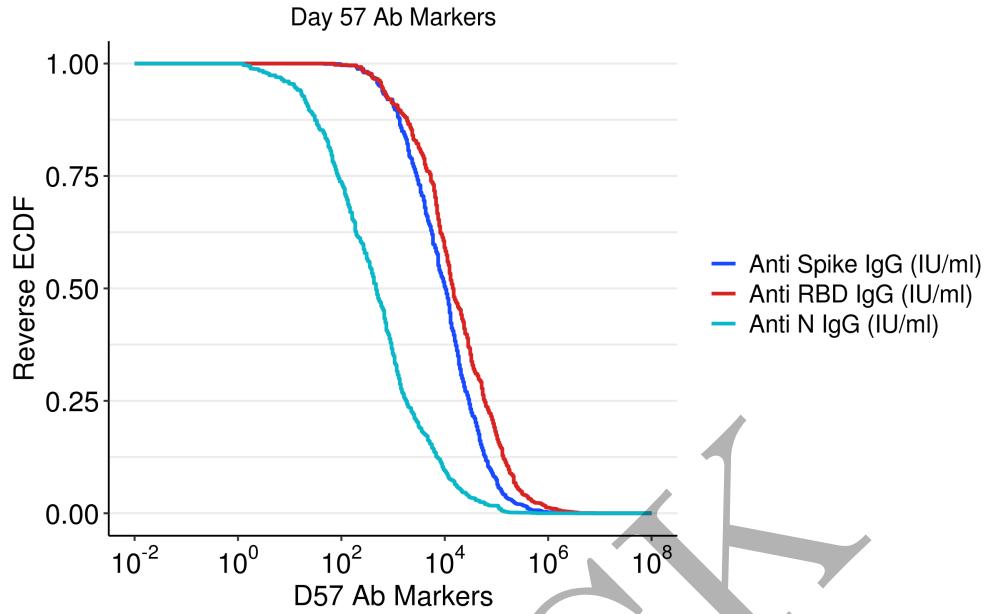


Figure 2.33: RCDF plots for D57 bAb markers: baseline negative vaccine arm

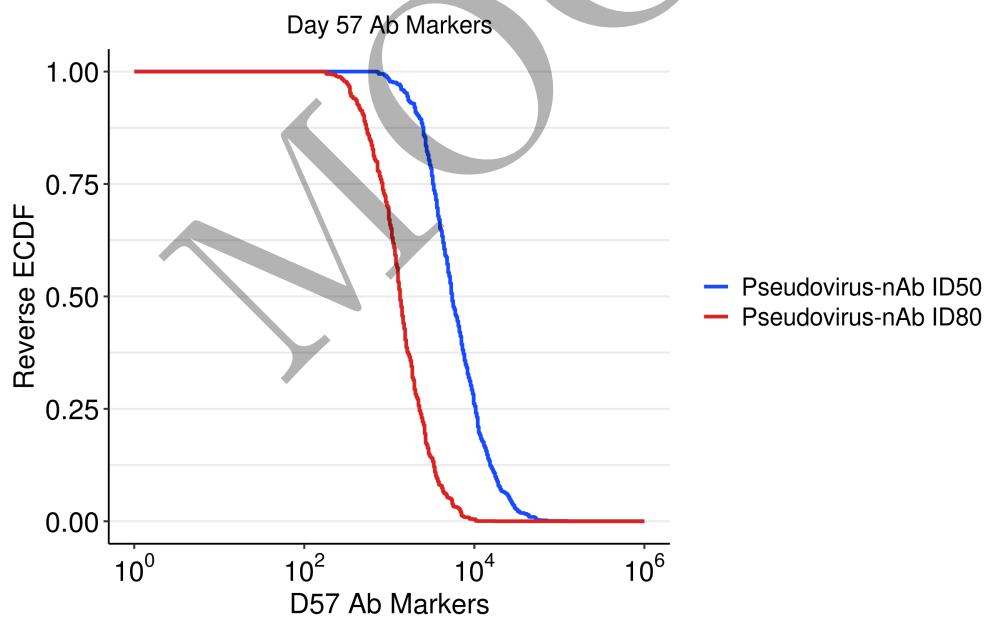


Figure 2.34: RCDF plots for D57 nAb markers: baseline negative vaccine arm

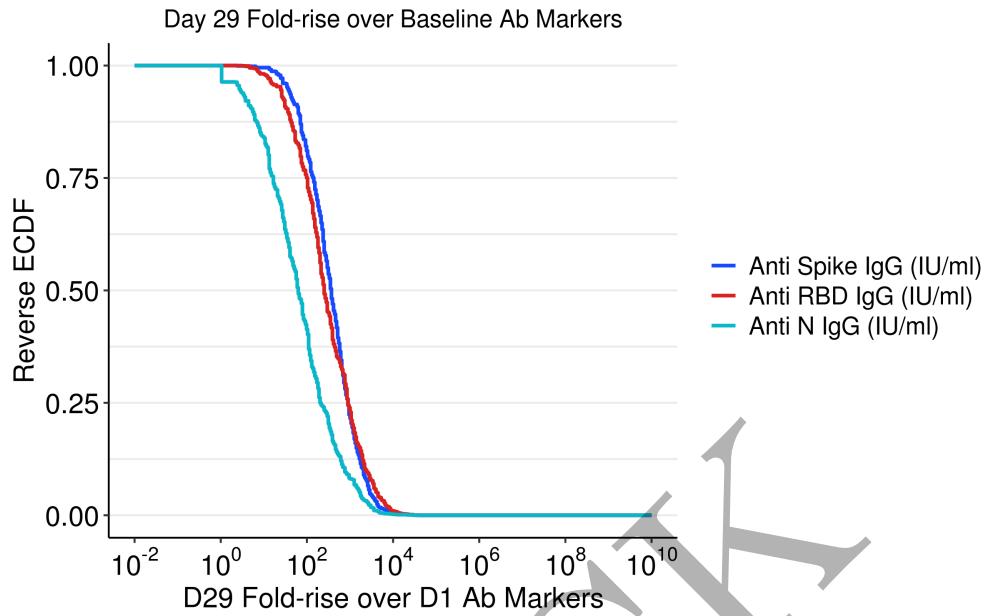


Figure 2.35: RCDF plots for D29 fold-rise over D1 bAb markers: baseline-negative vaccine arm

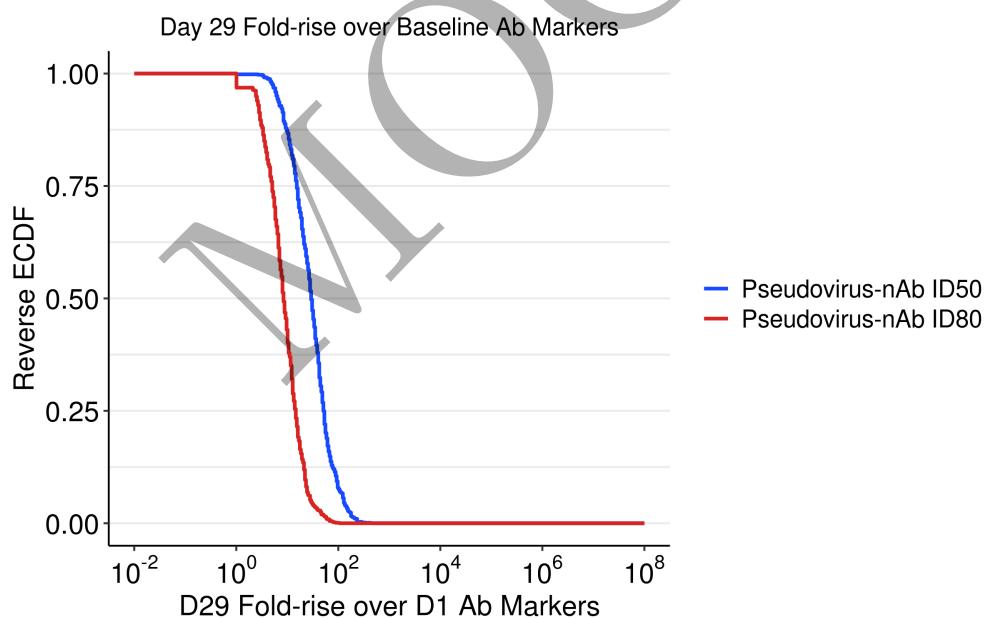


Figure 2.36: RCDF plots for D29 fold-rise over D1 nAb markers: baseline negative vaccine arm

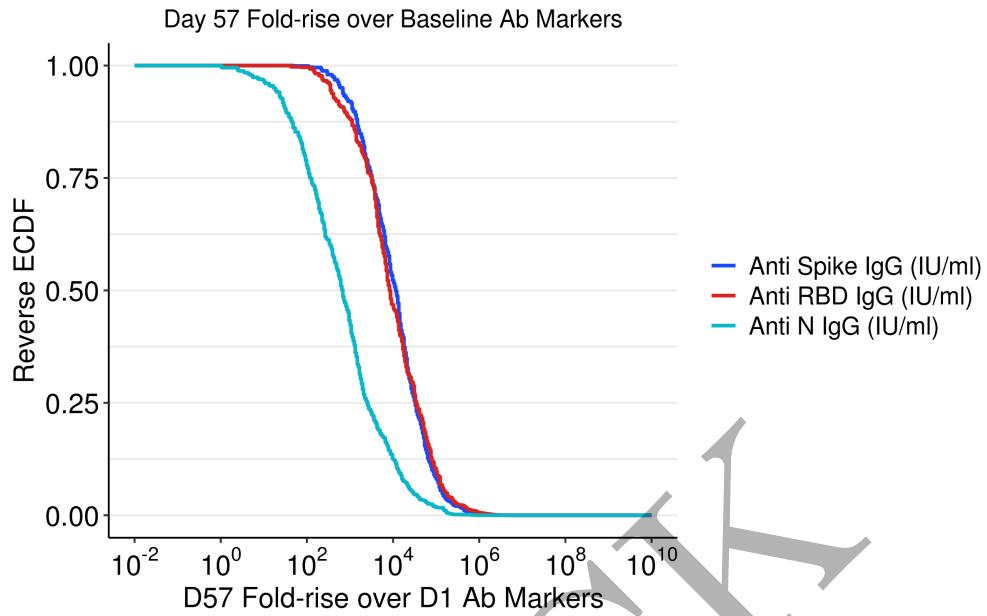


Figure 2.37: RCDF plots for D57 fold-rise over D1 bAb markers: baseline negative vaccine arm

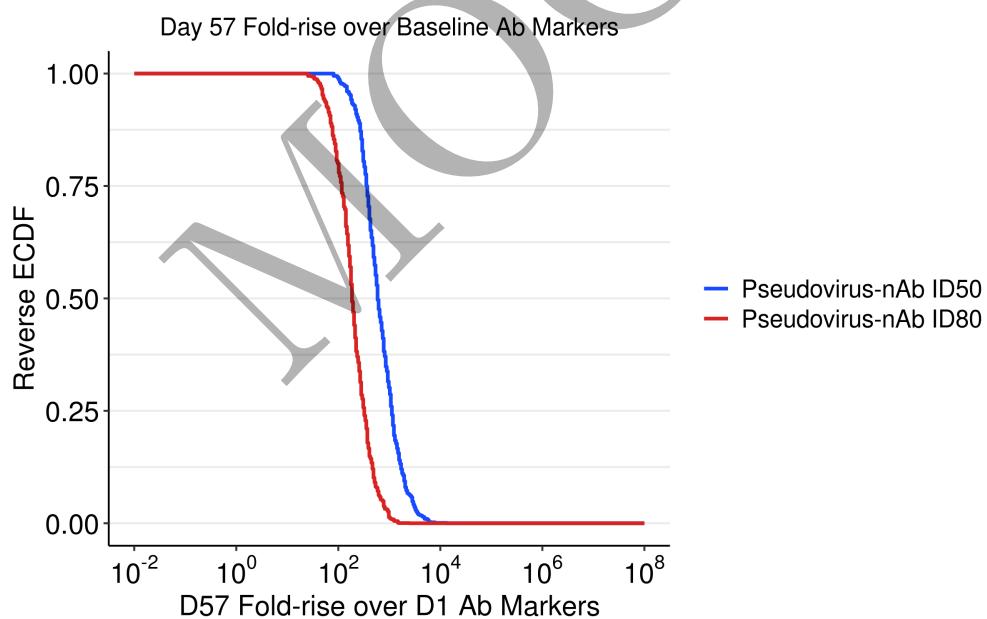


Figure 2.38: RCDF plots for D57 fold-rise over D1 nAb markers: baseline negative vaccine arm

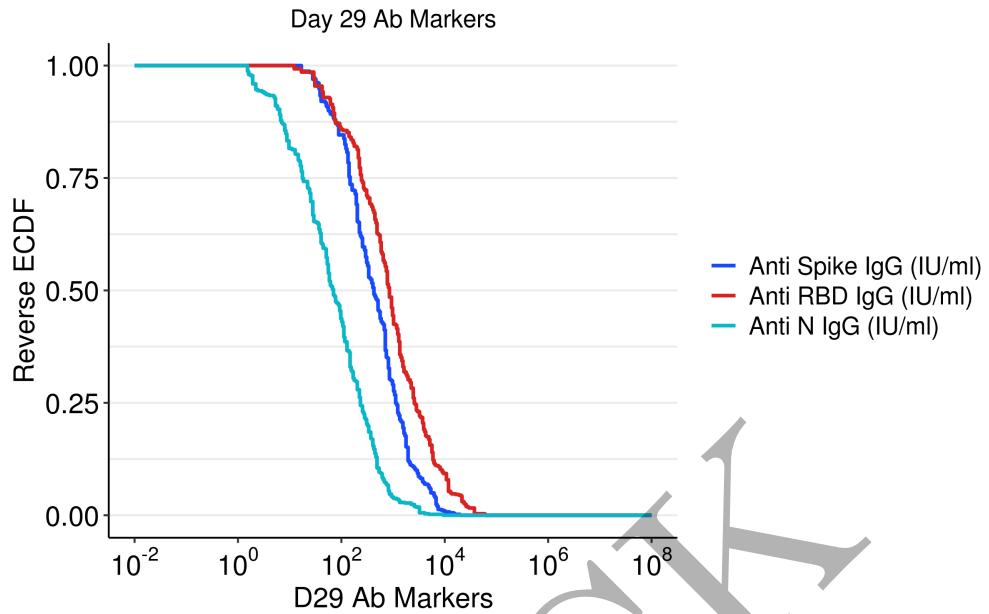


Figure 2.39: RCDF plots for D29 bAb markers: baseline positive vaccine arm

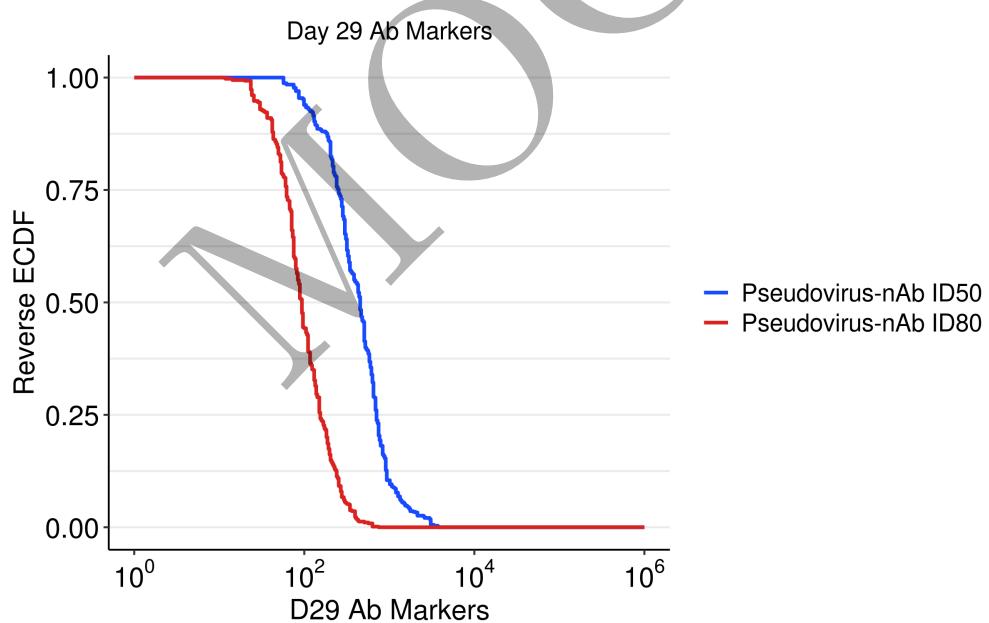


Figure 2.40: RCDF plots for D29 nAb markers: baseline positive vaccine arm

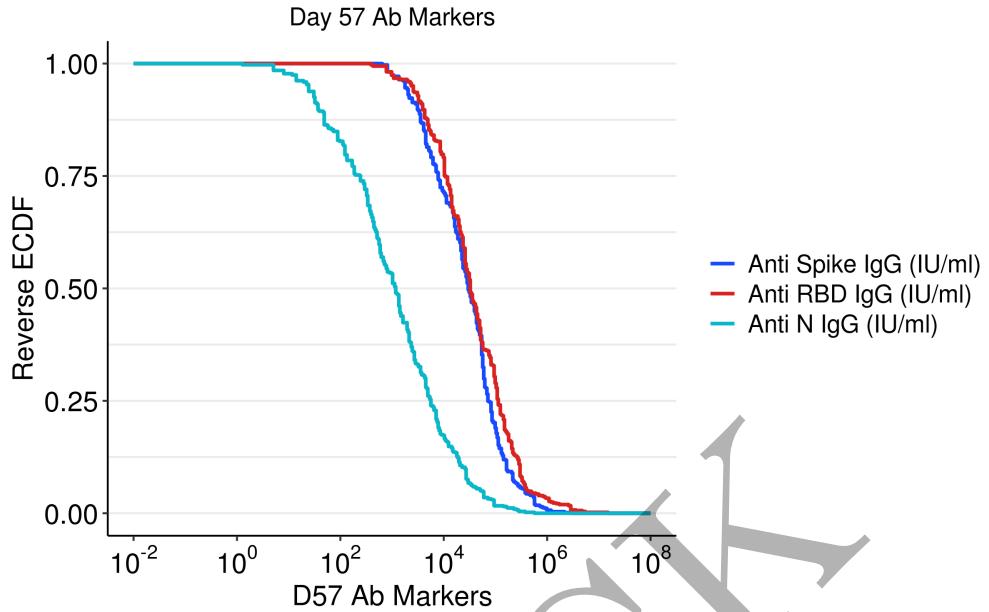


Figure 2.41: RCDF plots for D57 bAb markers: baseline positive vaccine arm

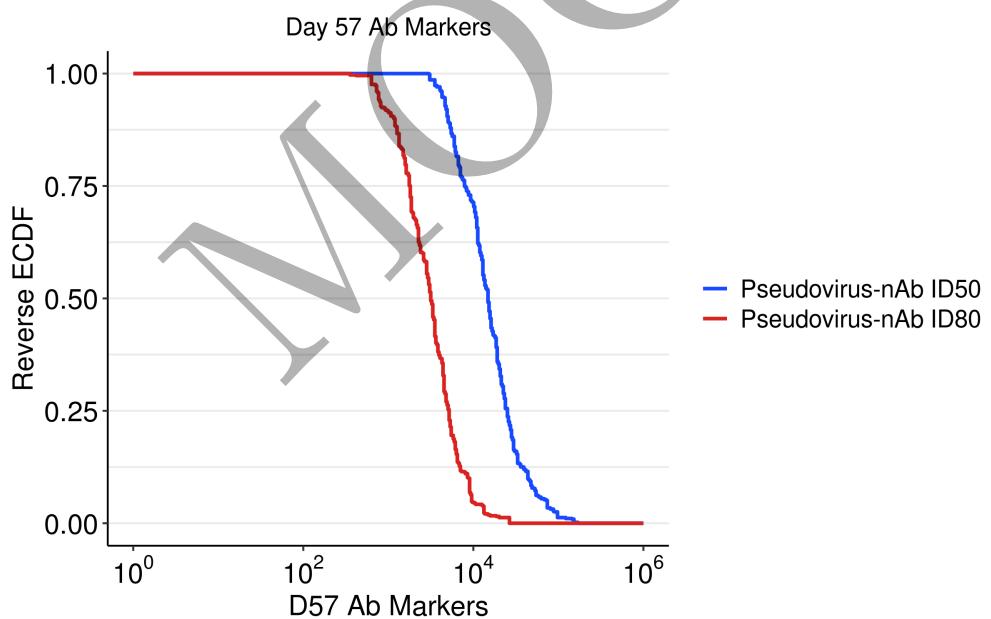


Figure 2.42: RCDF plots for D57 nAb markers: baseline positive vaccine arm

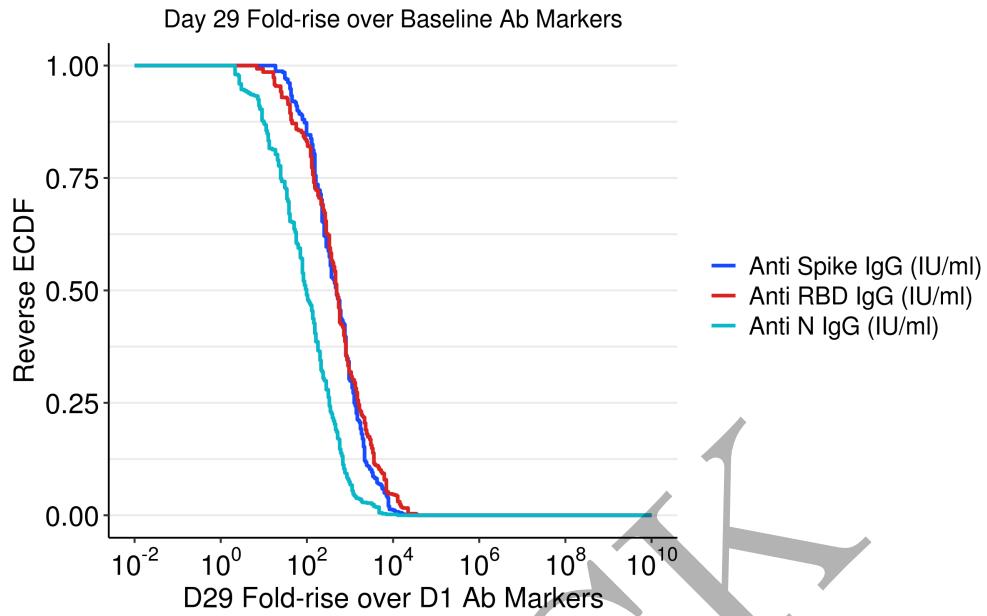


Figure 2.43: RCDF plots for D29 fold-rise over D1 bAb markers: baseline positive vaccine arm

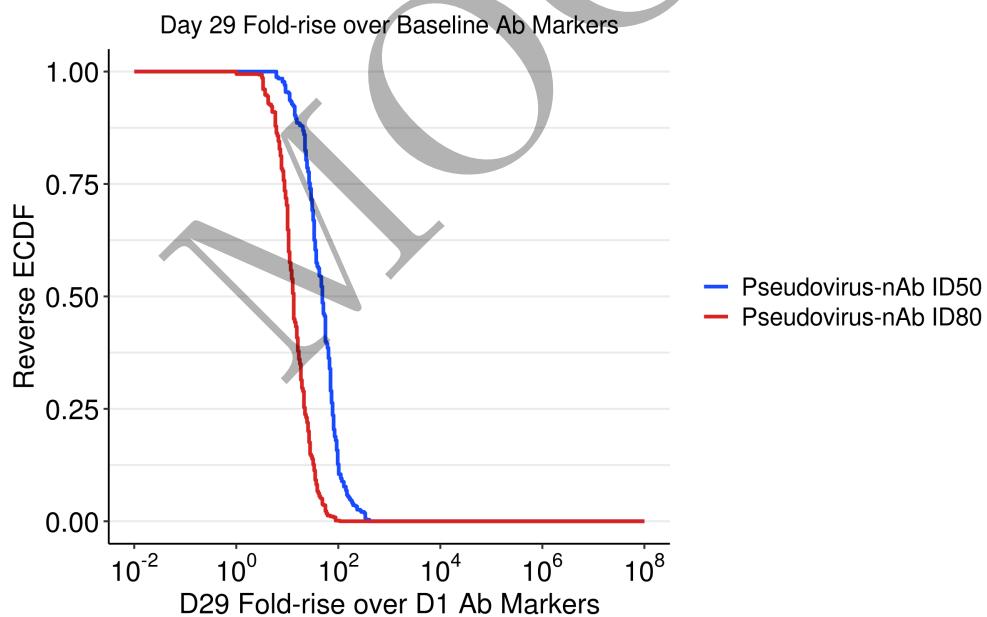


Figure 2.44: RCDF plots for D29 fold-rise over D1 nAb markers: baseline positive vaccine arm

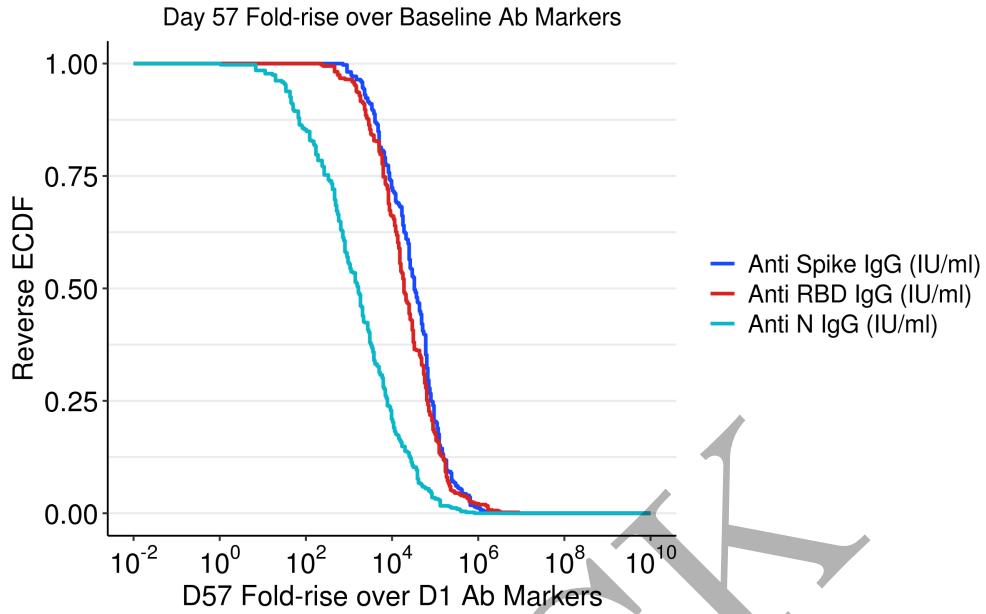


Figure 2.45: RCDF plots for D57 fold-rise over D1 bAb markers: baseline positive vaccine arm

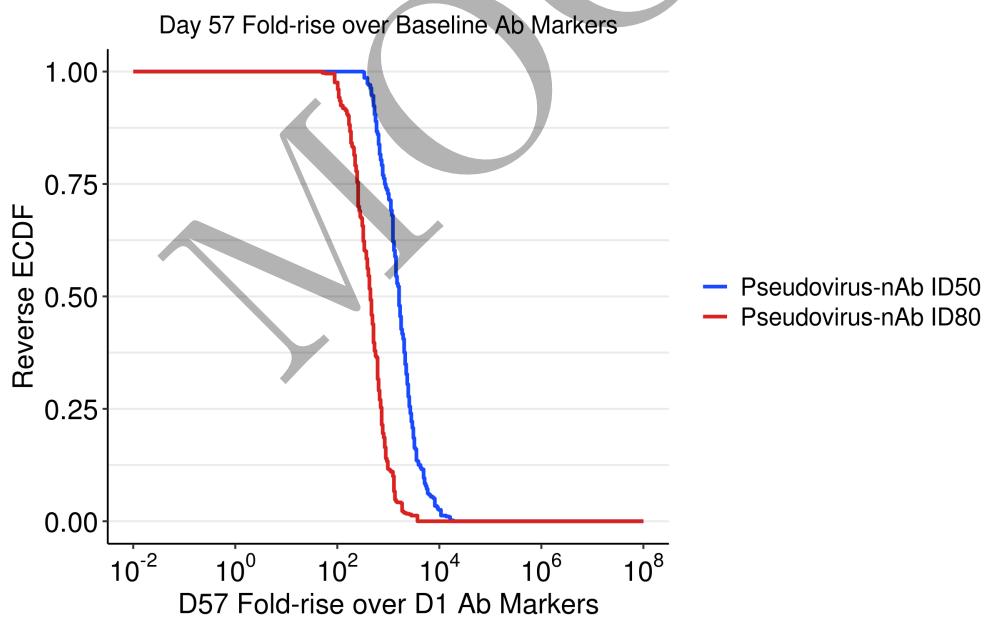


Figure 2.46: RCDF plots for D57 fold-rise over D1 nAb markers: baseline positive vaccine arm

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

2.3.1 Baseline SARS-CoV-2 negative

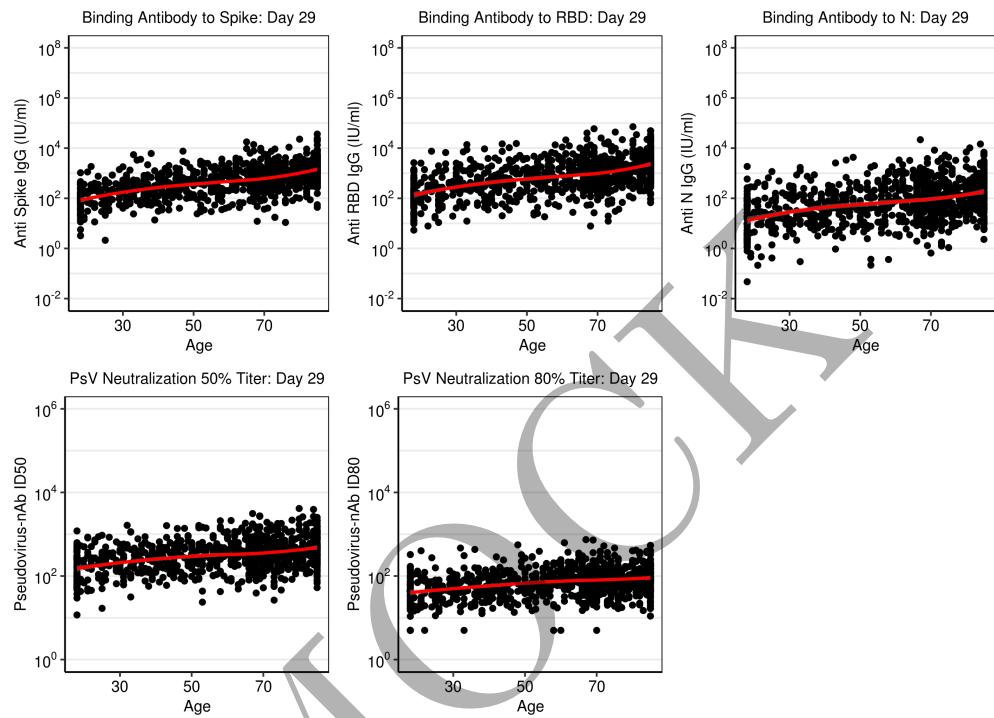


Figure 2.47: Scatter plots for D29 Ab markers vs. age: baseline negative vaccine arm

2.3. SCATTER PLOTS OF ANTIBODY MARKERS VERSUS AGE FOR OVERALL PER-PROTOCOL COHORT519

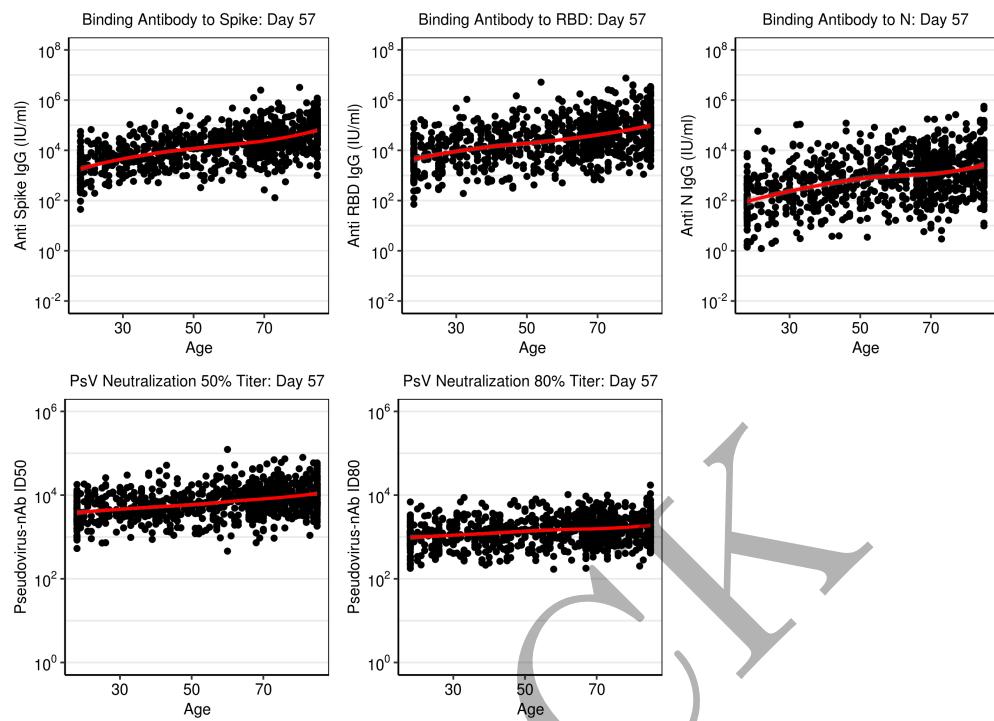


Figure 2.48: Scatter plots for D57 Ab markers vs. age: baseline negative vaccine arm

2.3.2 Baseline SARS-CoV-2 positive

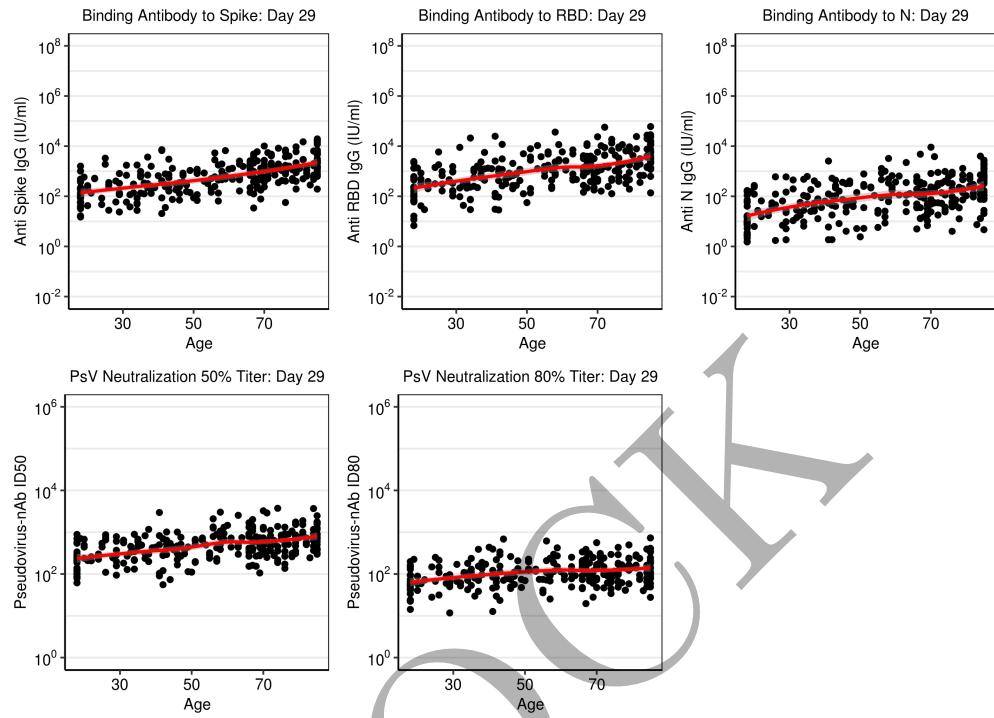


Figure 2.49: Scatter plots for D29 Ab markers vs. age: baseline positive vaccine arm

2.3. SCATTER PLOTS OF ANTIBODY MARKERS VERSUS AGE FOR OVERALL PER-PROTOCOL COHORT521

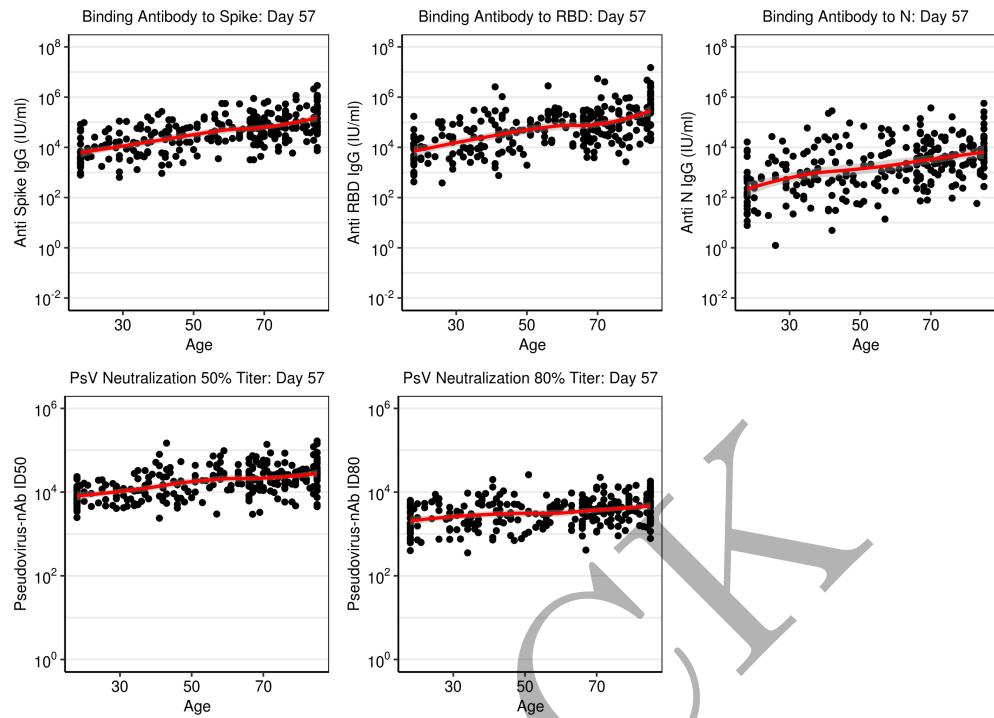


Figure 2.50: Scatter plots for D57 Ab markers vs. age: baseline positive vaccine arm

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

2.4.1 Baseline SARS-CoV-2 negative

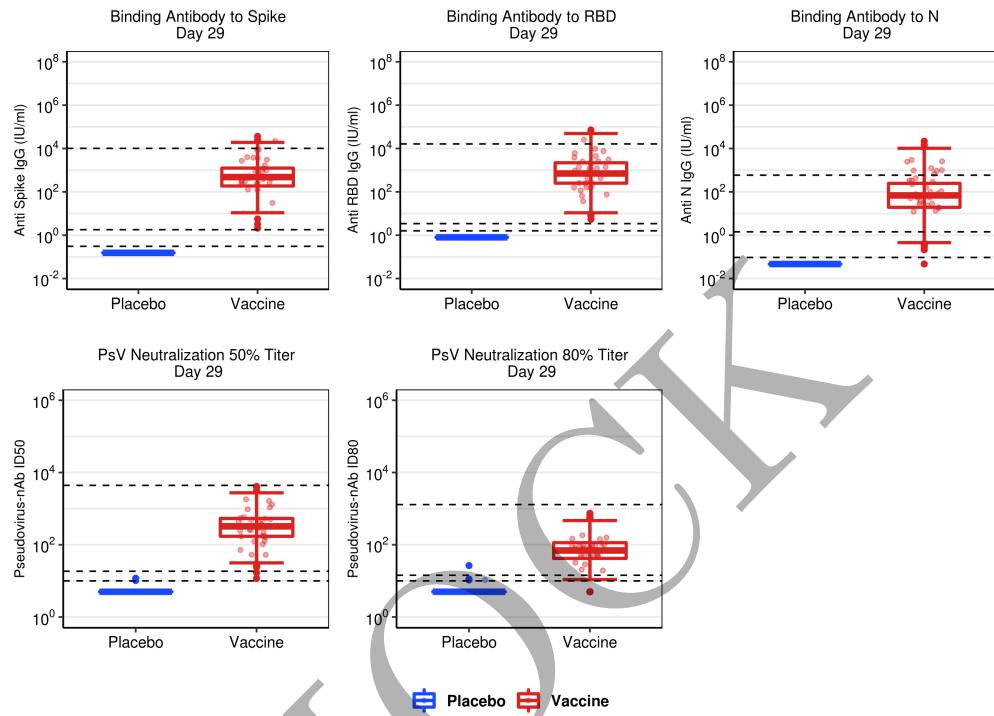


Figure 2.51: Boxplots of D29 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.

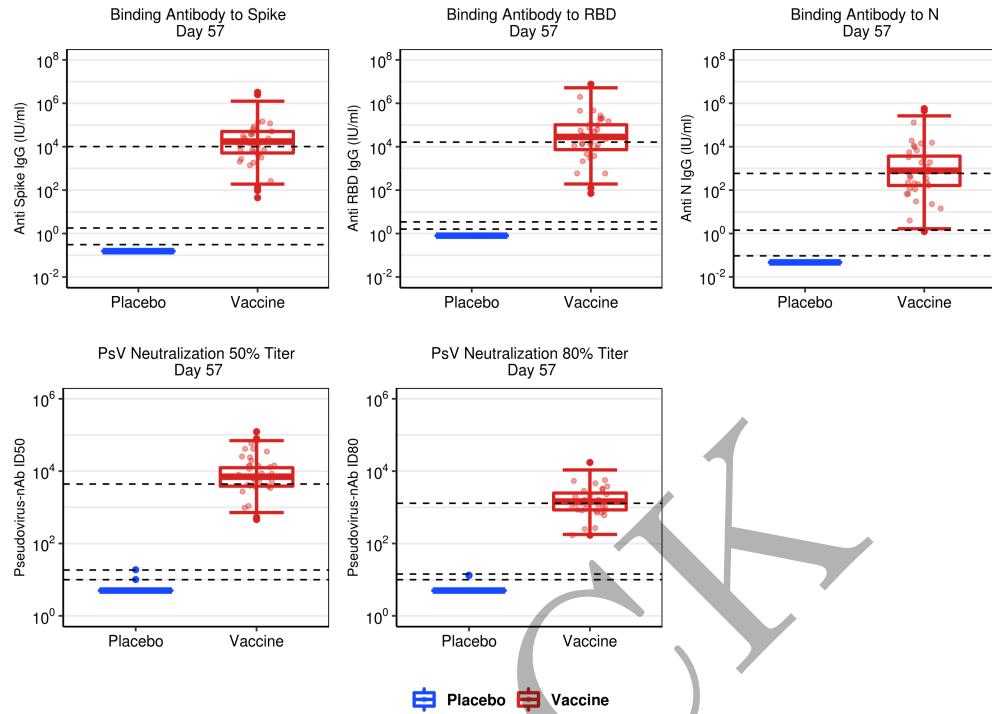


Figure 2.52: Boxplots of D57 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.

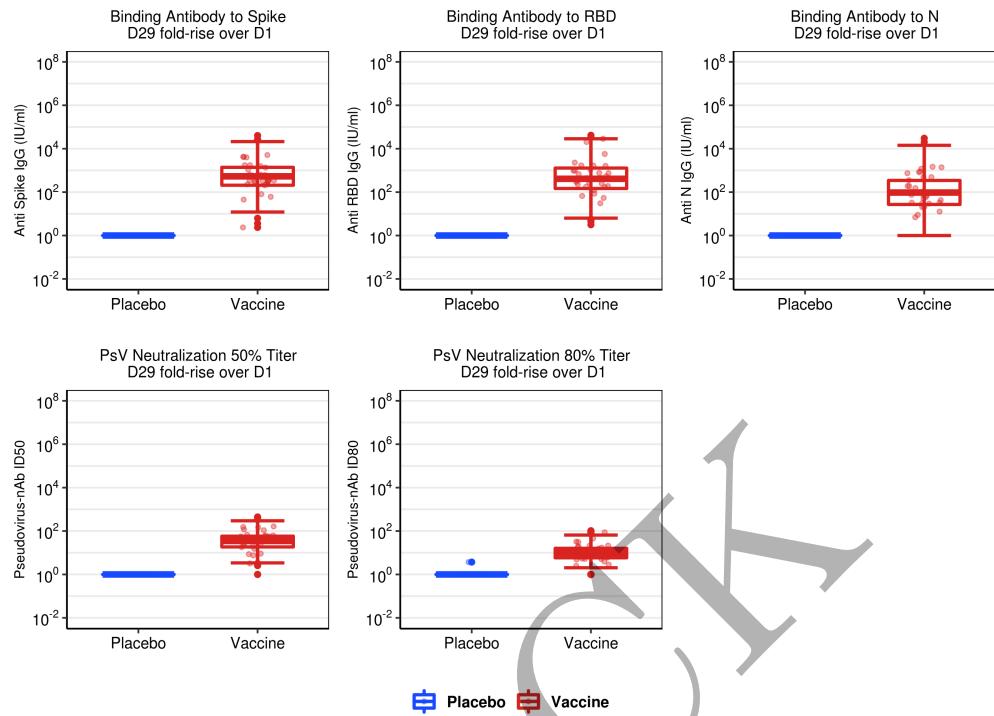


Figure 2.53: Boxplots of D29 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

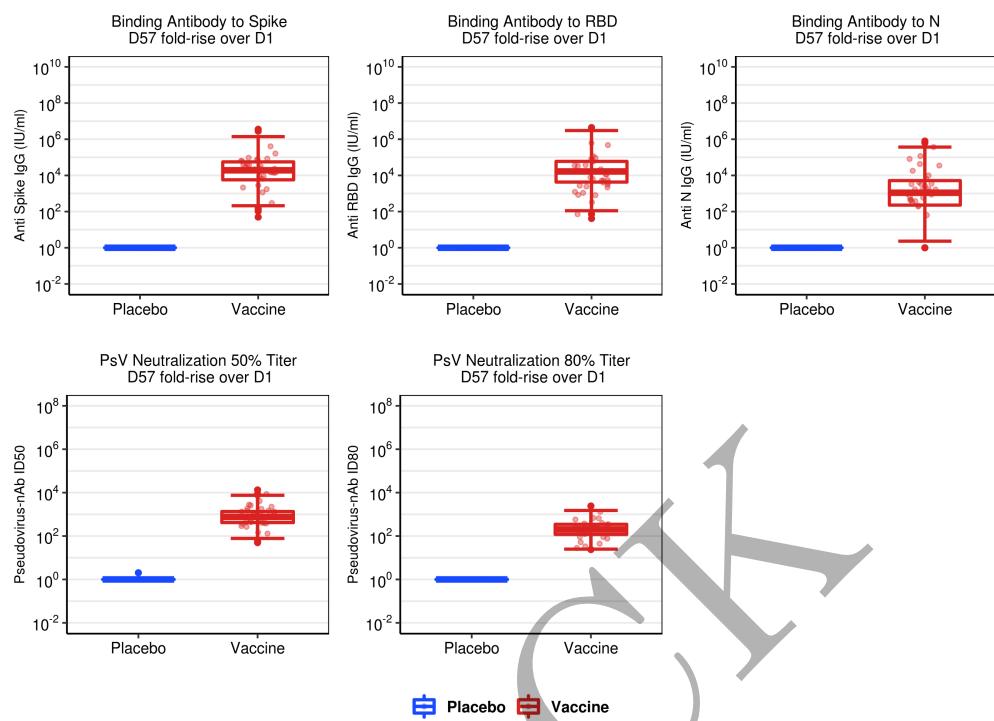


Figure 2.54: Boxplots of D57 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

2.4.2 Baseline SARS-CoV-2 positive

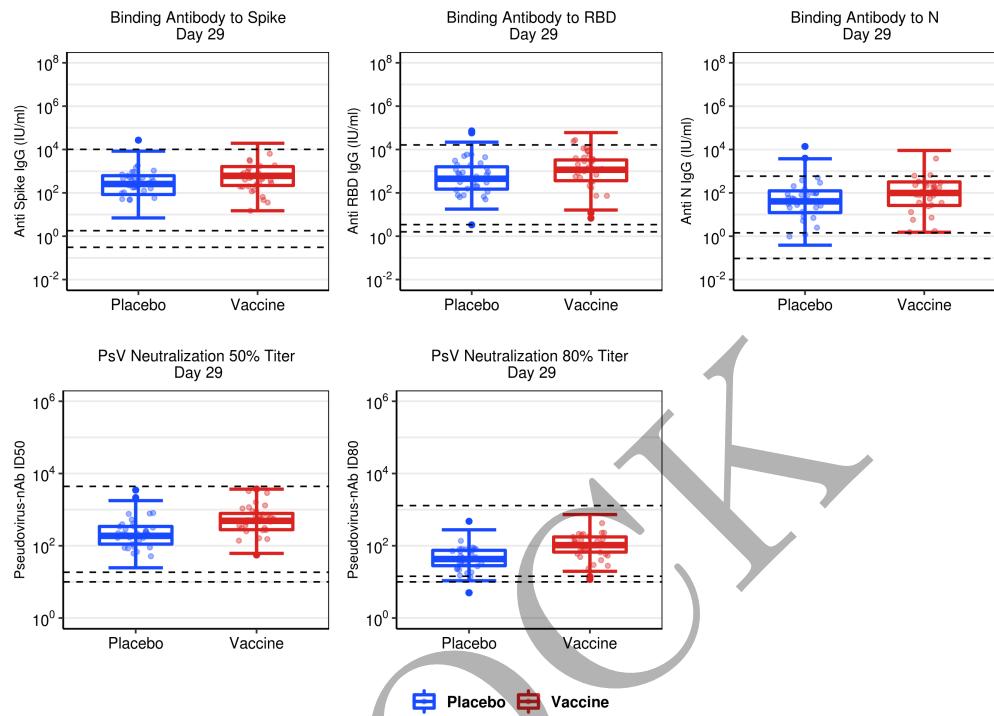


Figure 2.55: Boxplots of D29 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.

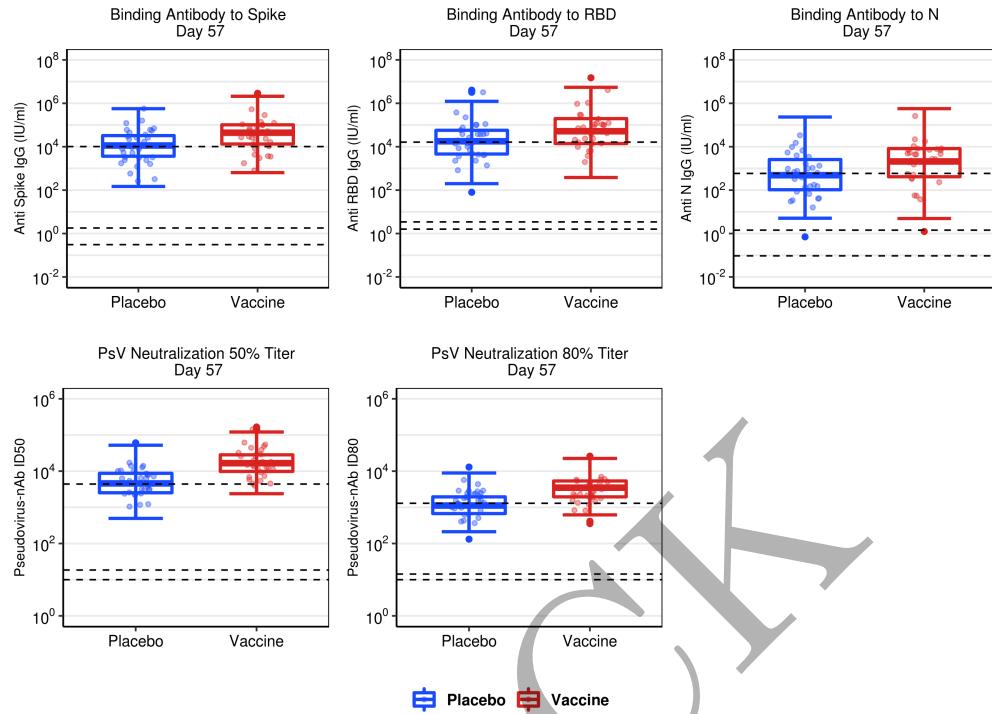


Figure 2.56: Boxplots of D57 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.

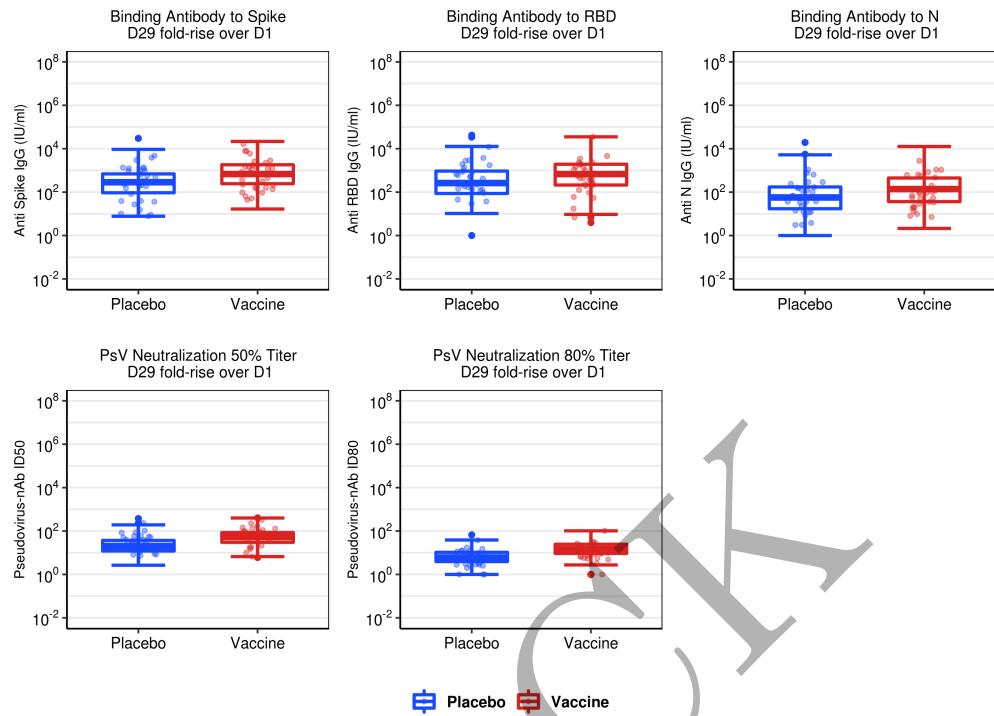


Figure 2.57: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms

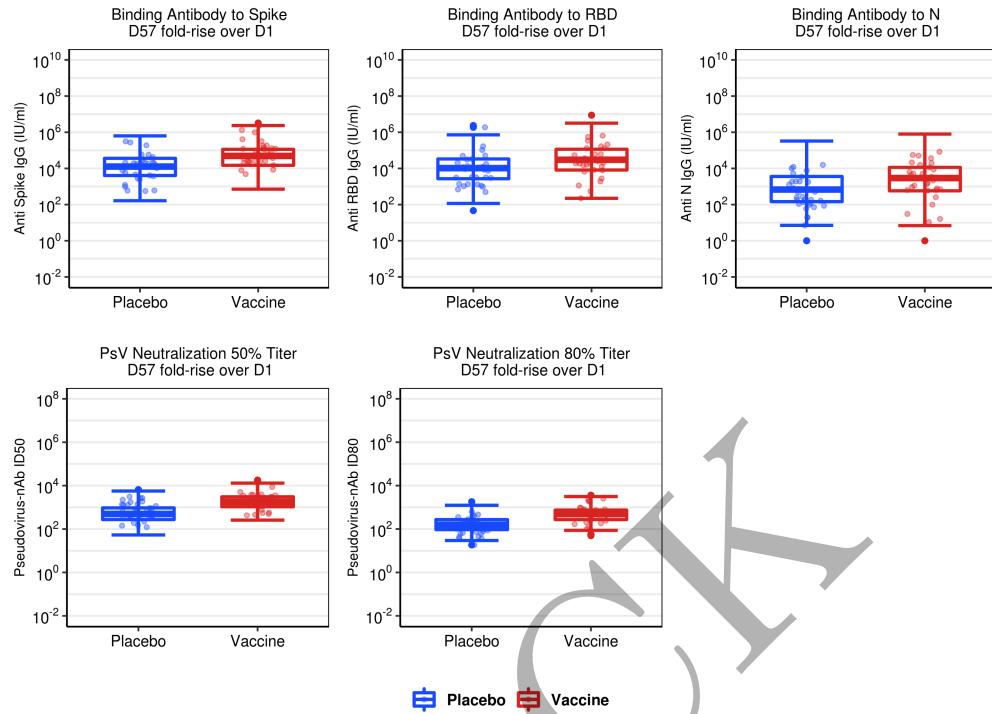


Figure 2.58: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms

2.4.3 Baseline negative vs. positive vaccine recipients

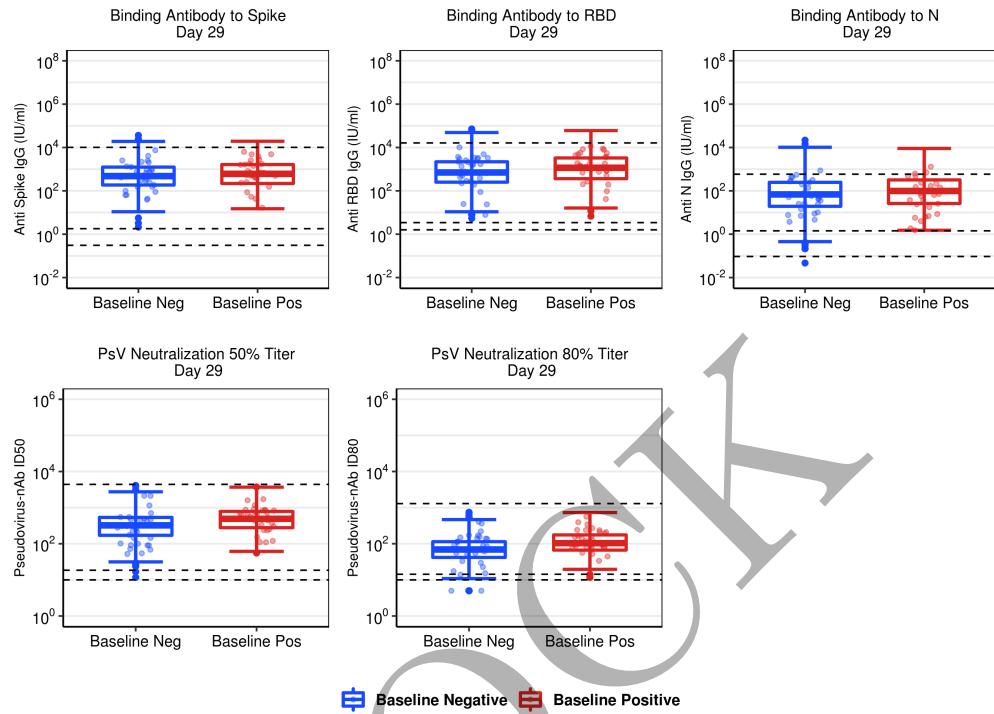


Figure 2.59: Boxplots of D29 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, LLOQ, and LLQD, from top to bottom respectively.

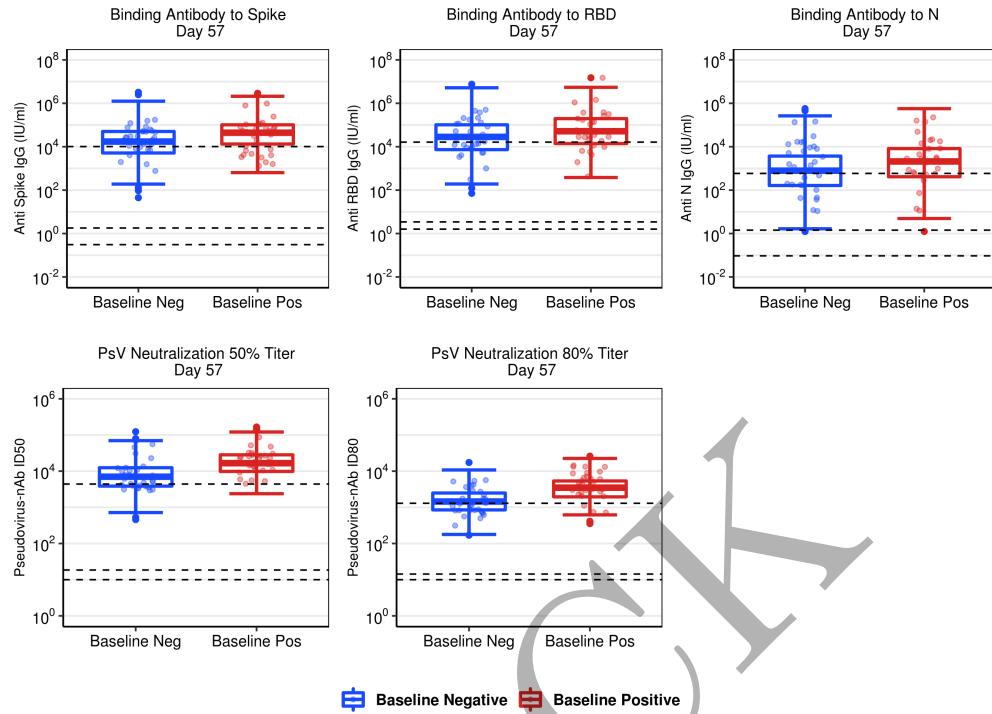


Figure 2.60: Boxplots of D57 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, LLOQ, and LLQD, from top to bottom respectively.

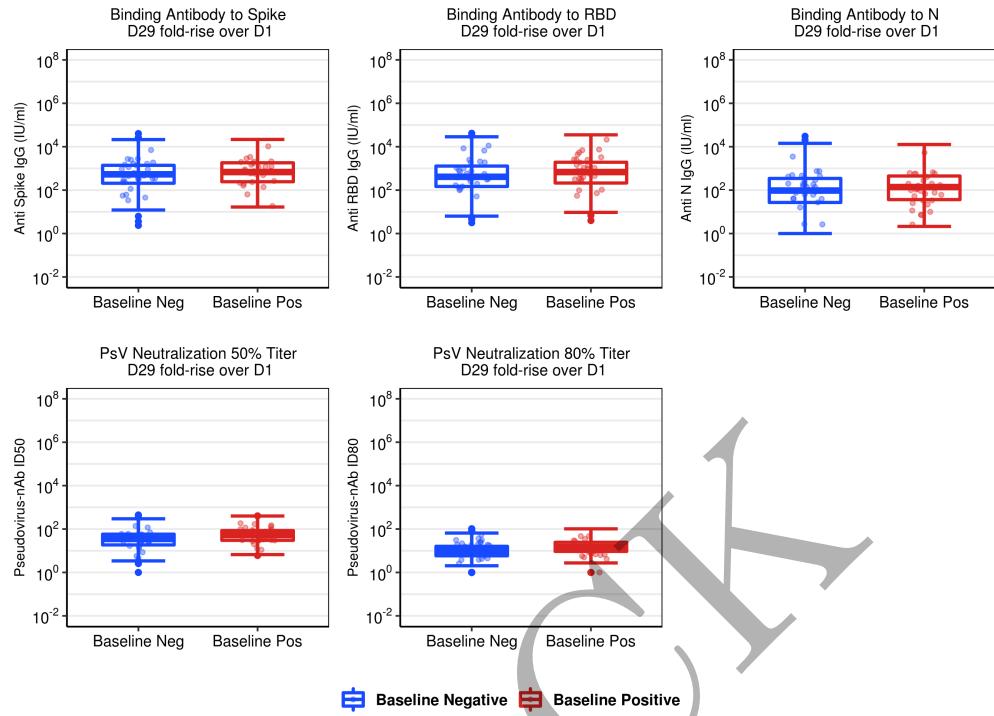


Figure 2.61: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm

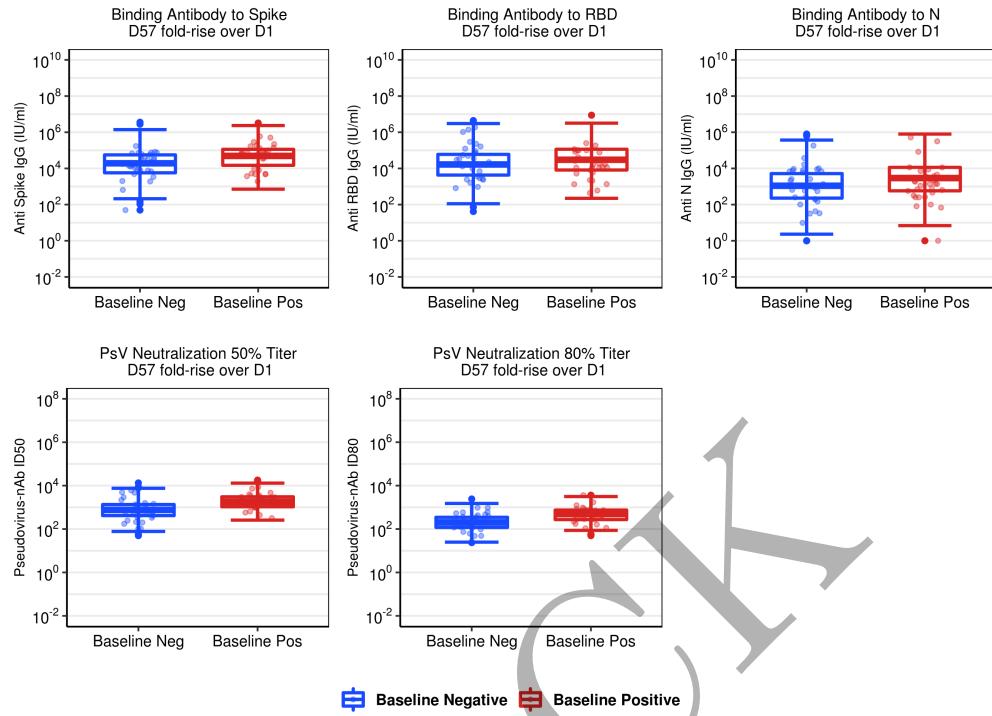


Figure 2.62: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm

2.4.4 Baseline negative vs. positive placebo recipients

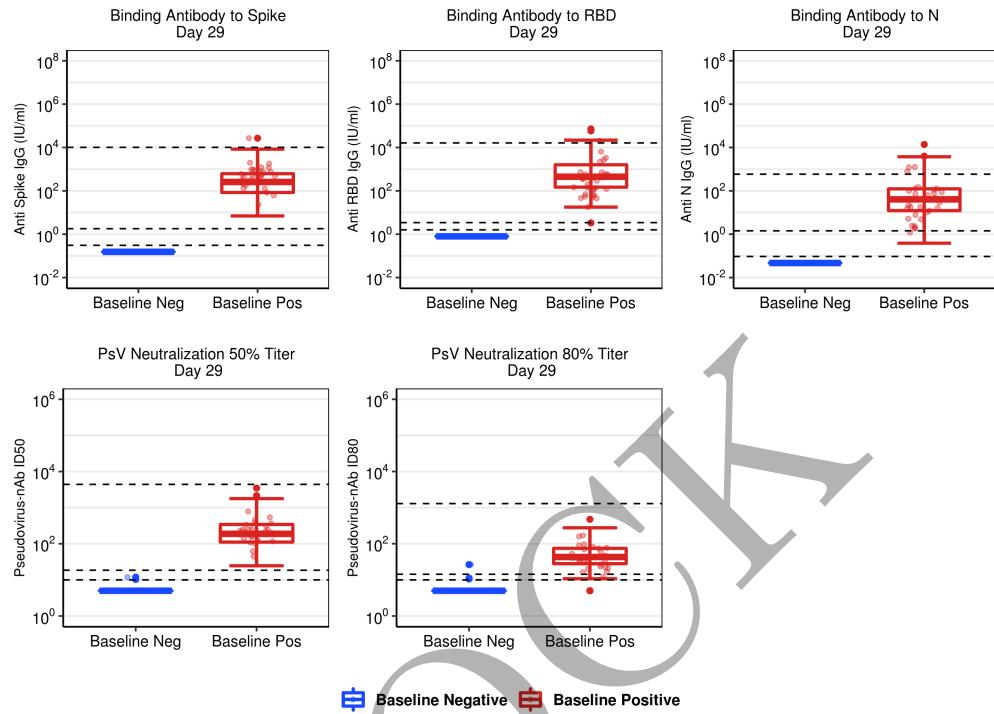


Figure 2.63: Boxplots of D29 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.

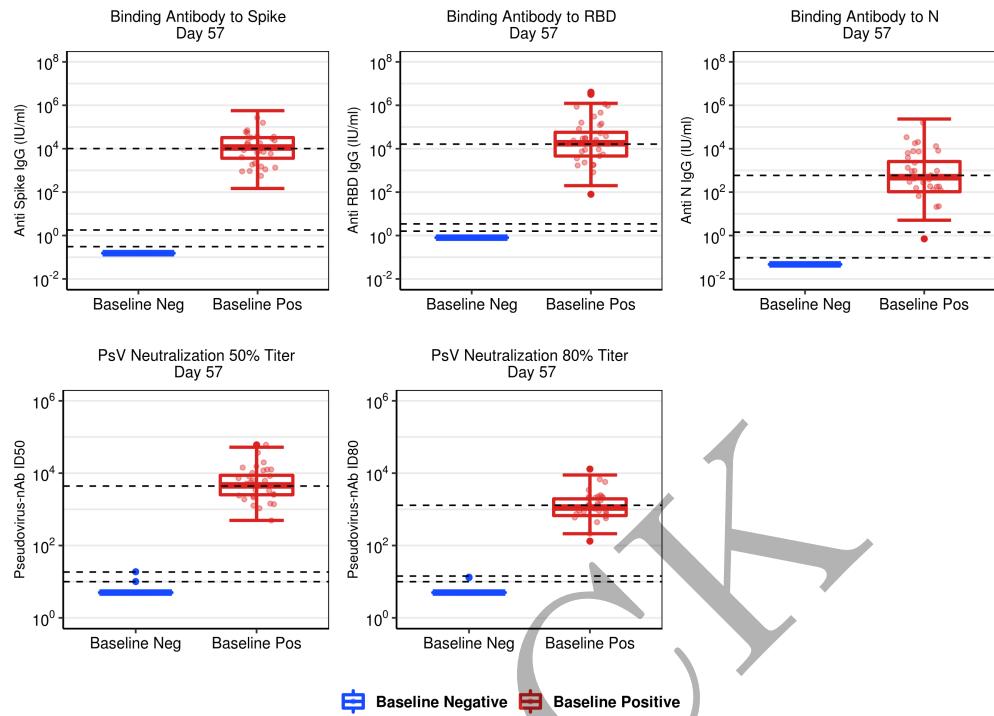


Figure 2.64: Boxplots of D57 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.

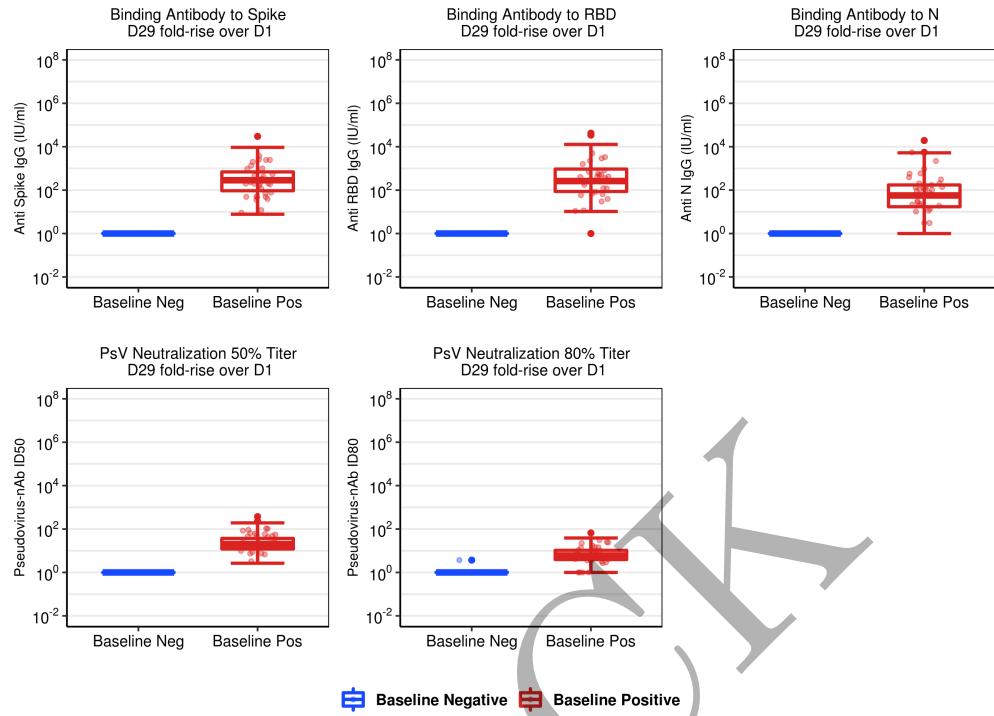


Figure 2.65: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

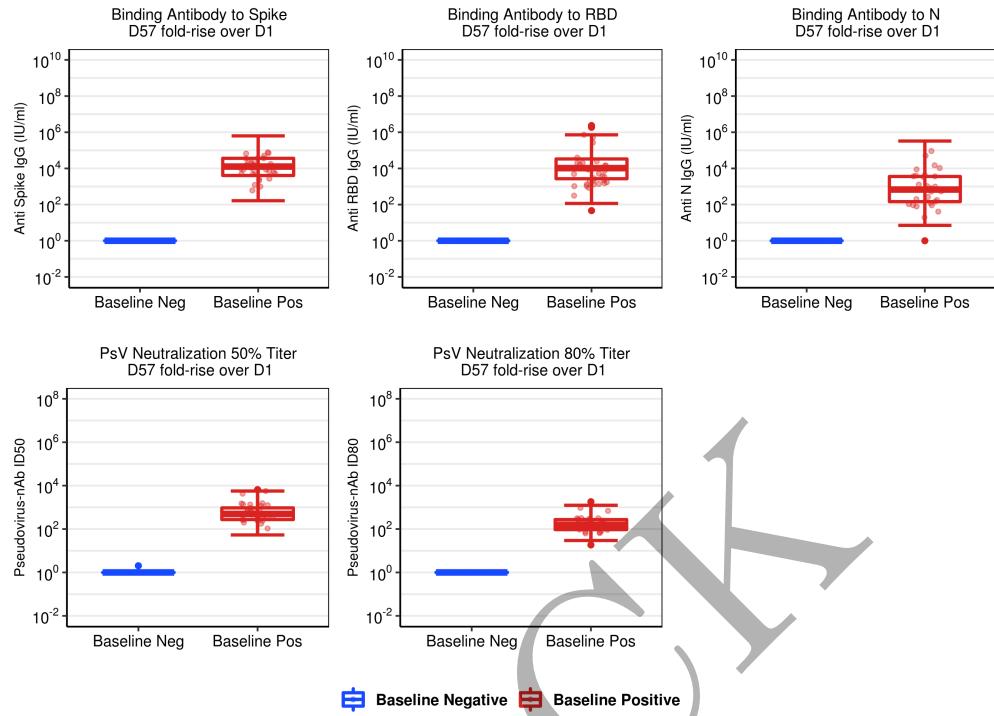


Figure 2.66: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

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

2.5.1 Baseline SARS-CoV-2 negative

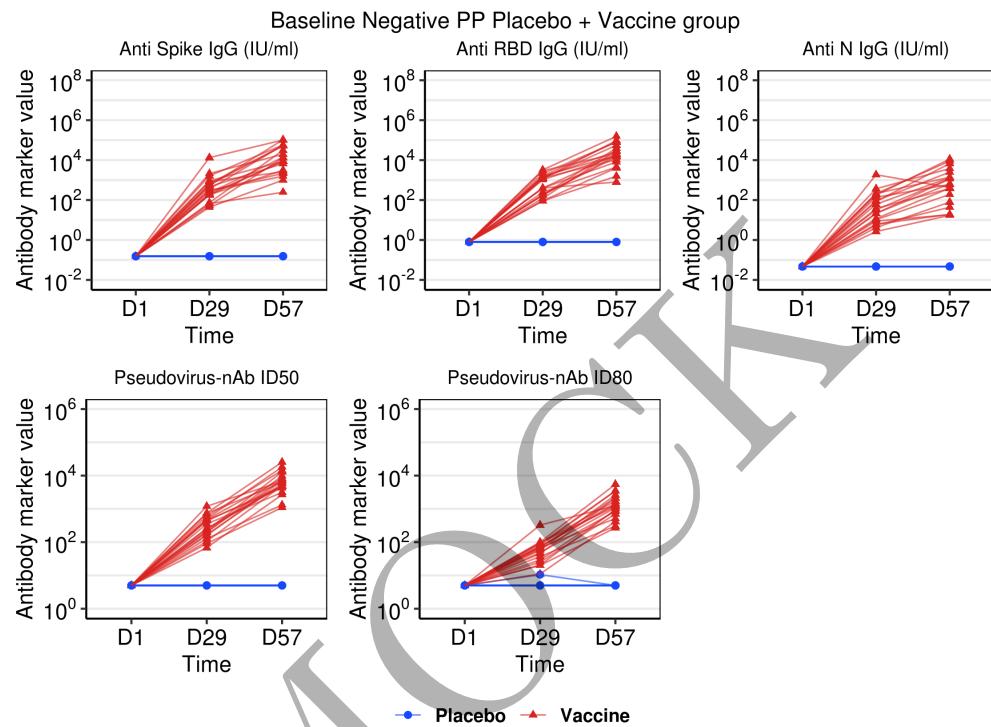


Figure 2.67: Spaghetti plots of Ab markers over time: baseline negative vaccine + placebo arm

2.5.2 Baseline SARS-CoV-2 positive

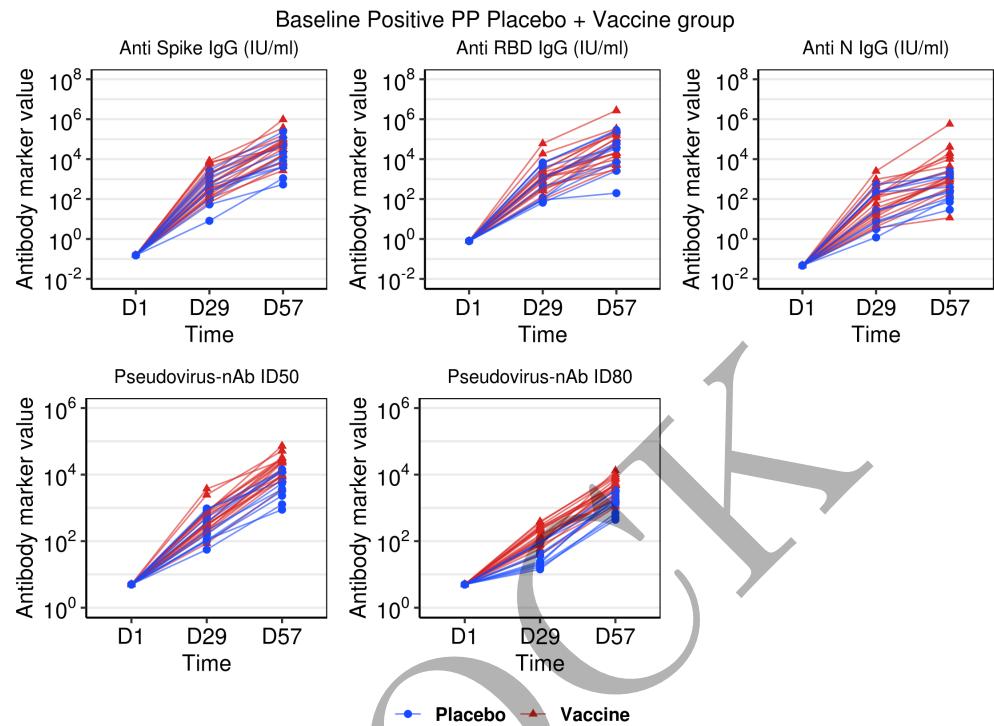


Figure 2.68: Spaghetti plots of Ab markers over time: baseline positive vaccine + placebo arm

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

2.6.1 Baseline SARS-CoV-2 negative

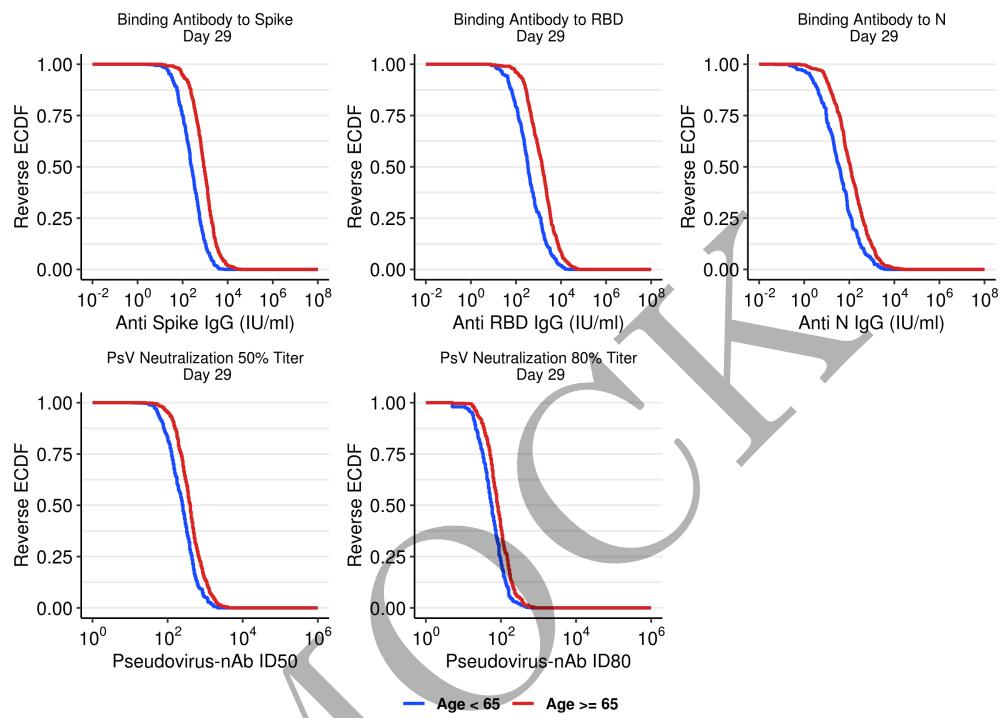


Figure 2.69: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age groups.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT541

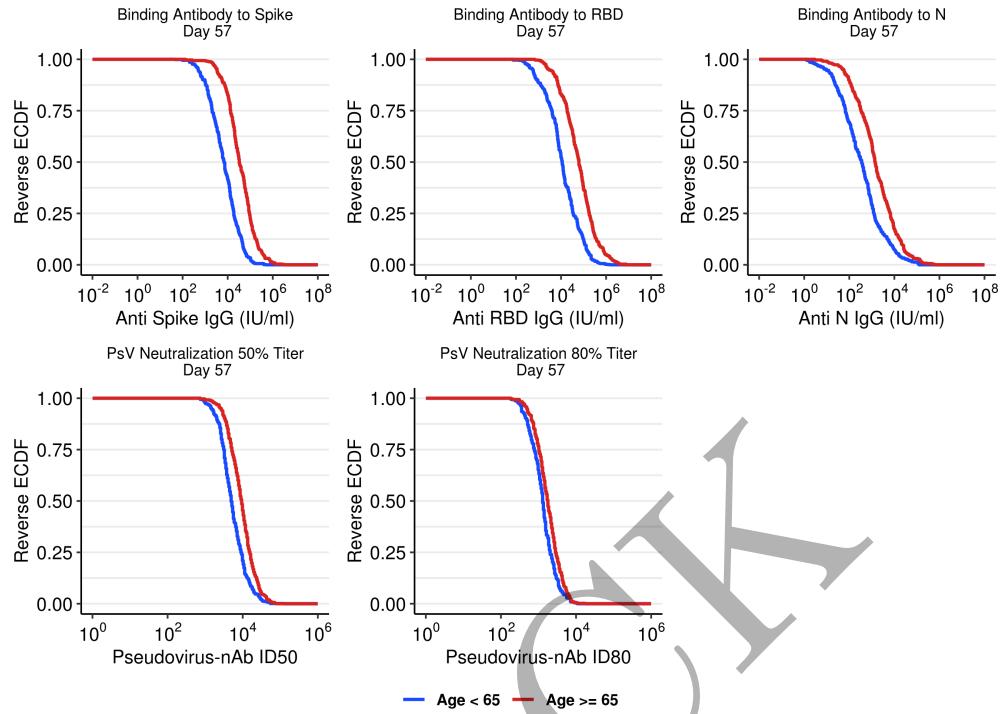


Figure 2.70: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age groups.

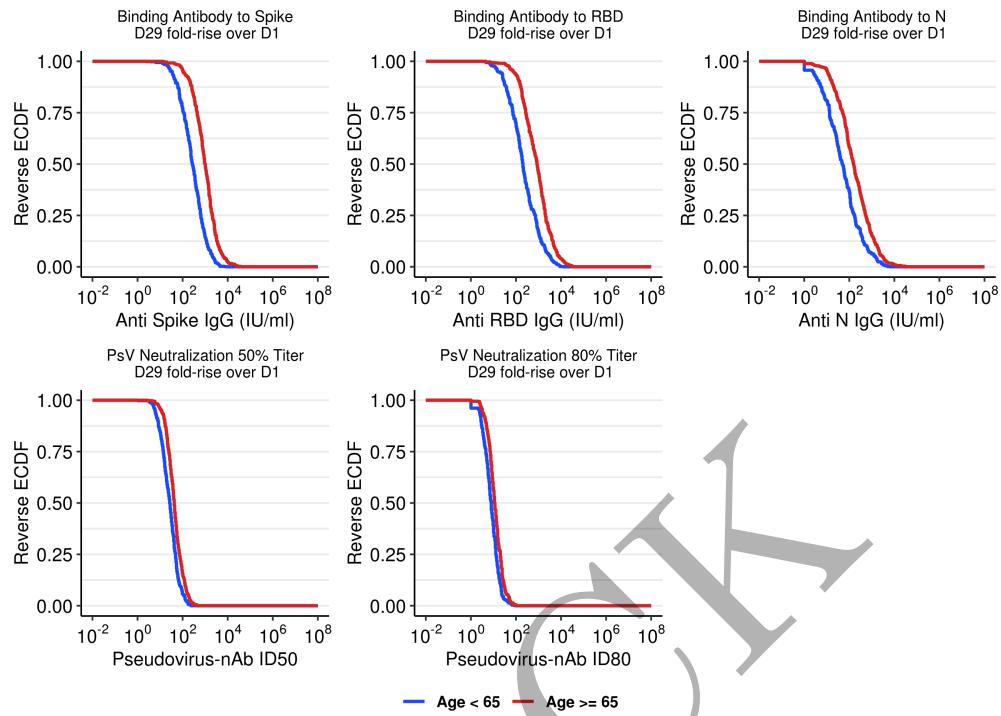


Figure 2.71: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT543

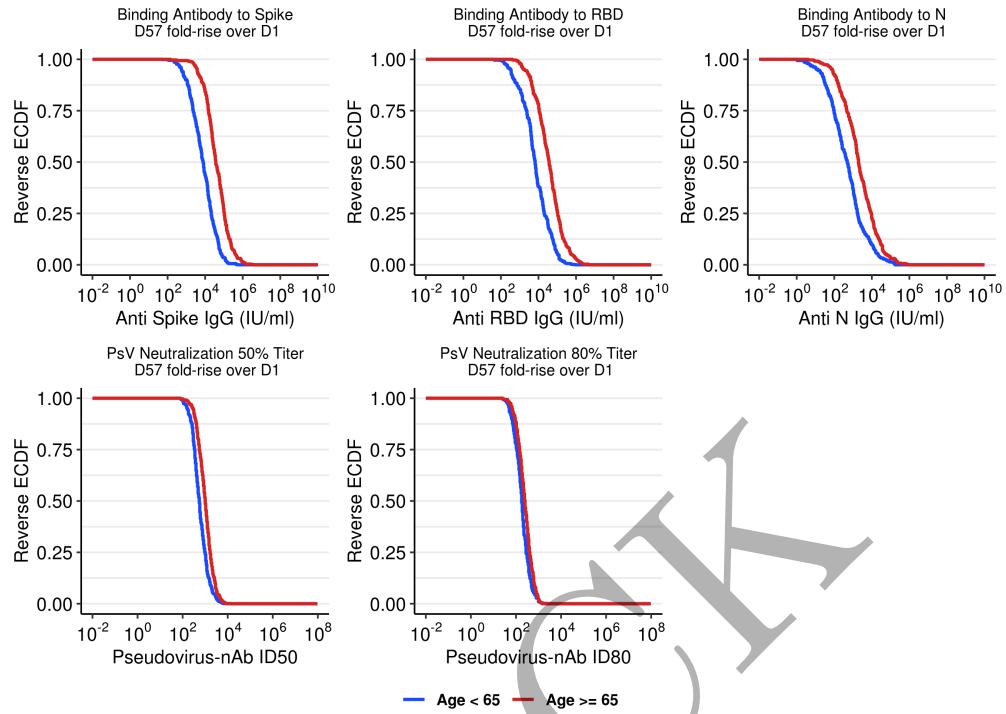


Figure 2.72: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

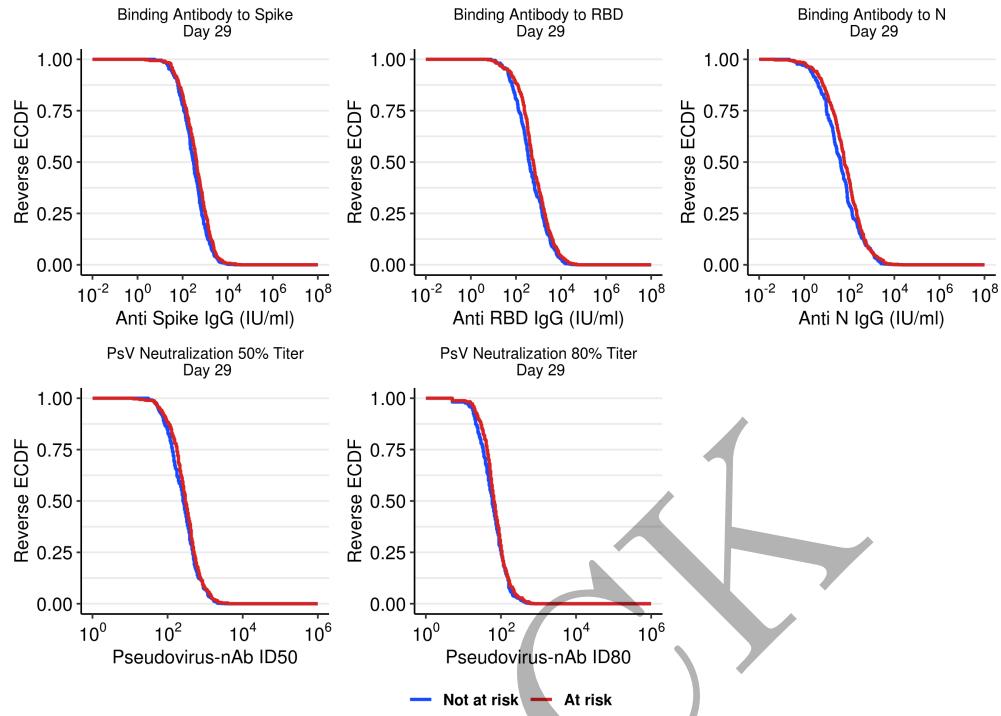


Figure 2.73: RCDF plots for D29 Ab markers: baseline negative vaccine arm by high-risk condition.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT545

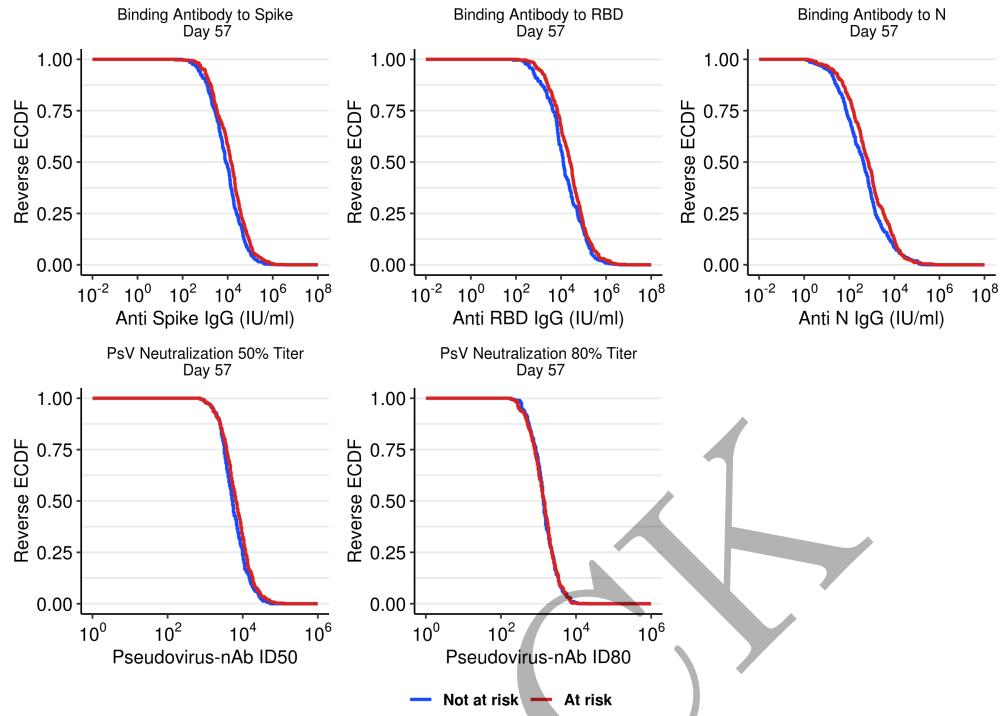


Figure 2.74: RCDF plots for D57 Ab markers: baseline negative vaccine arm by high-risk condition.

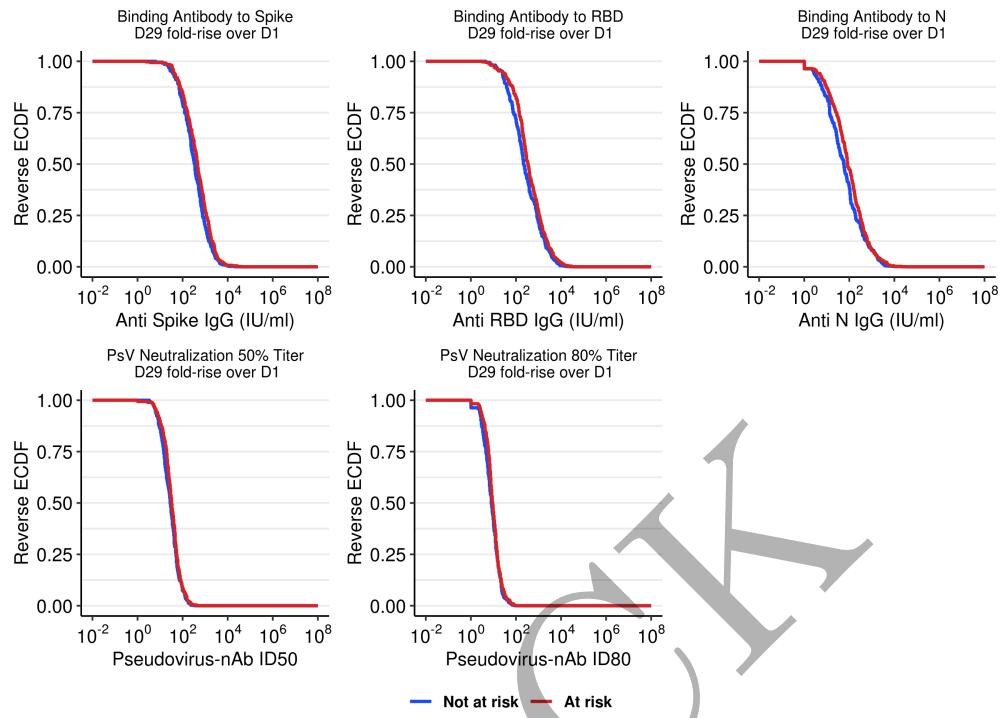


Figure 2.75: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT547

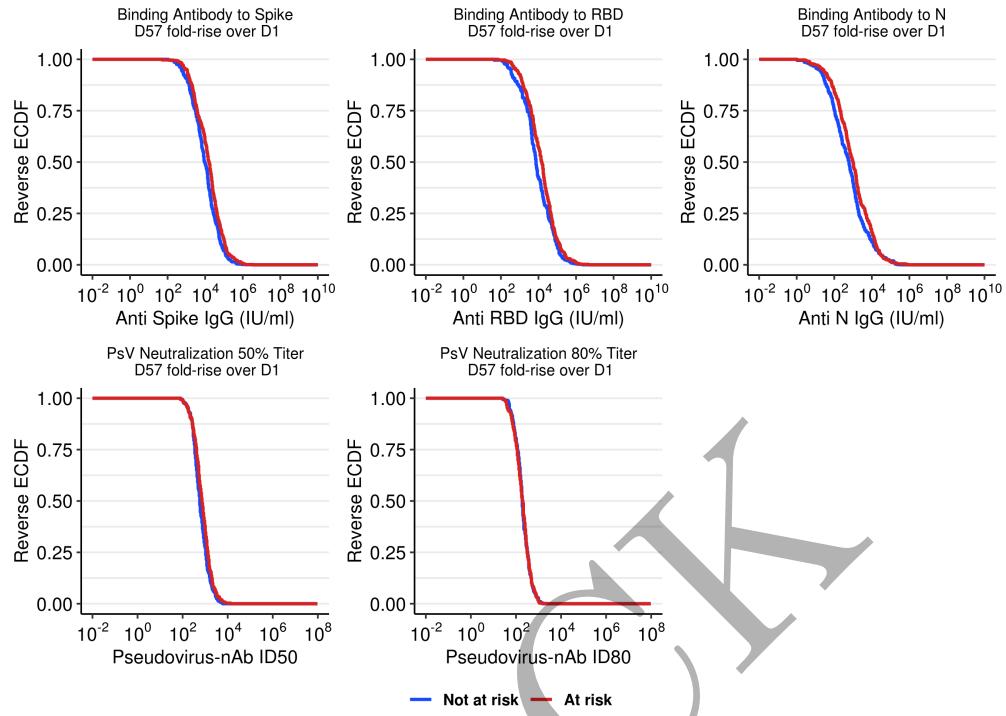


Figure 2.76: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

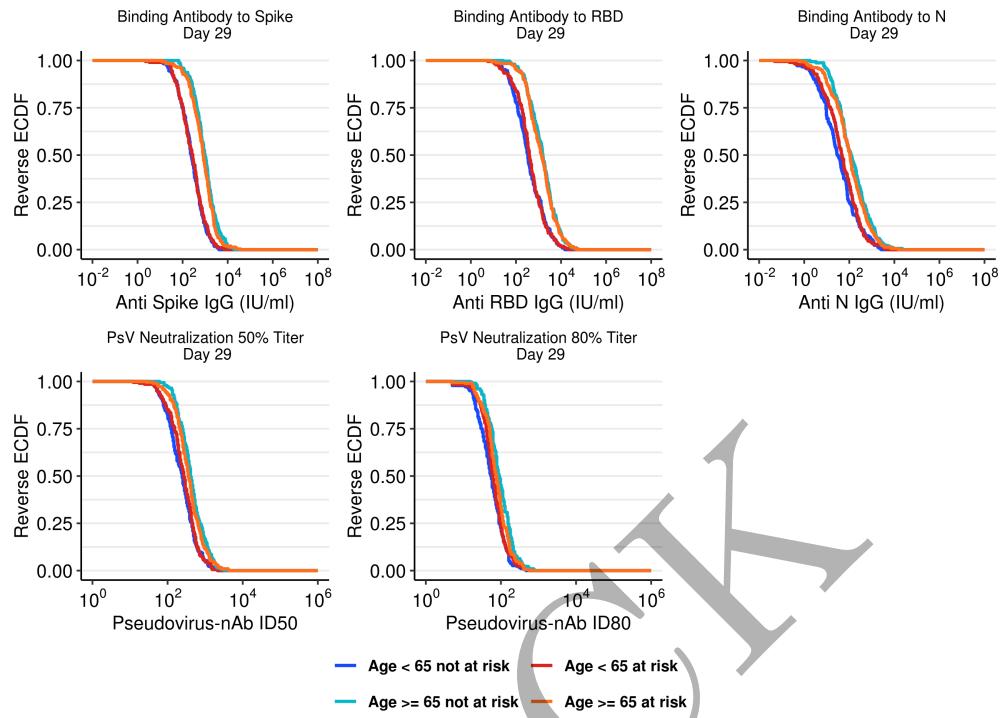


Figure 2.77: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and high-risk condition.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT549

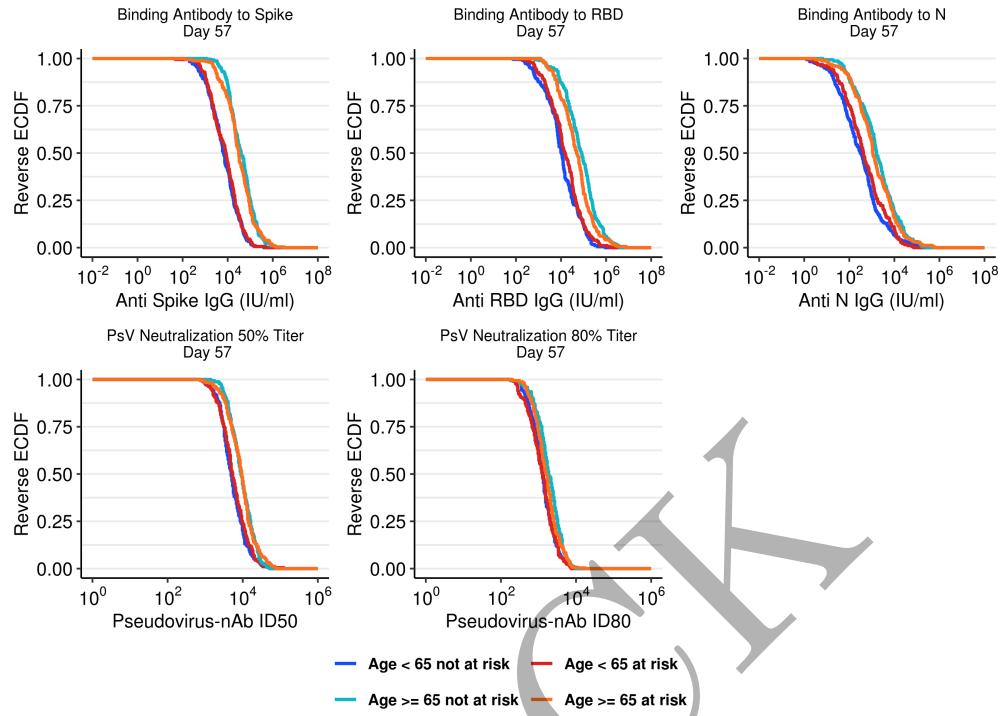


Figure 2.78: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and high-risk condition.

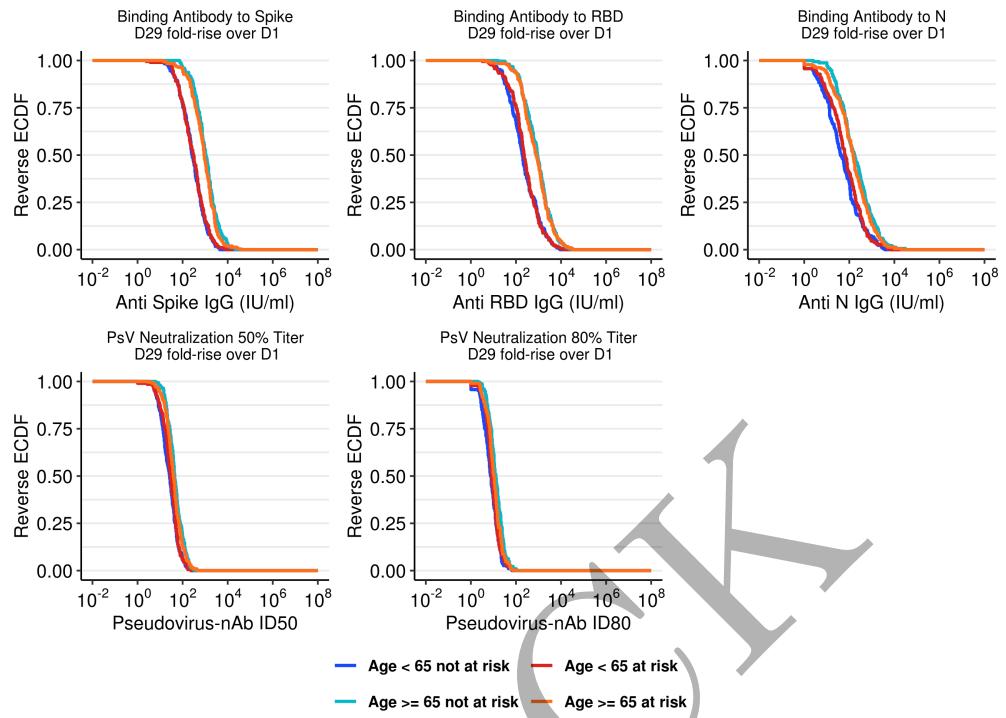


Figure 2.79: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT551

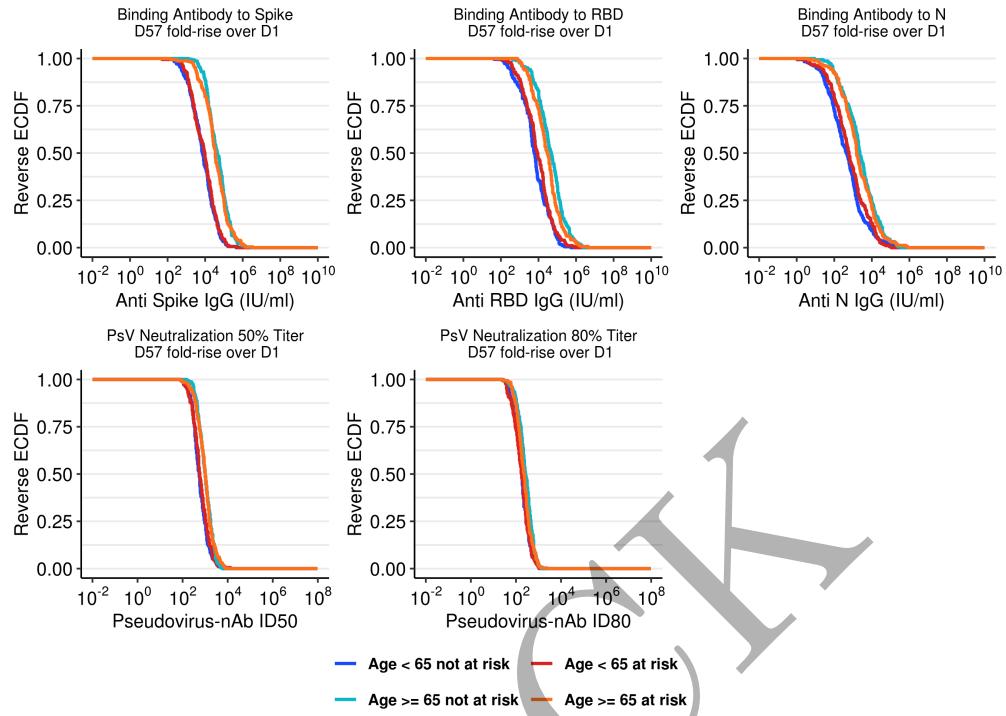


Figure 2.80: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.

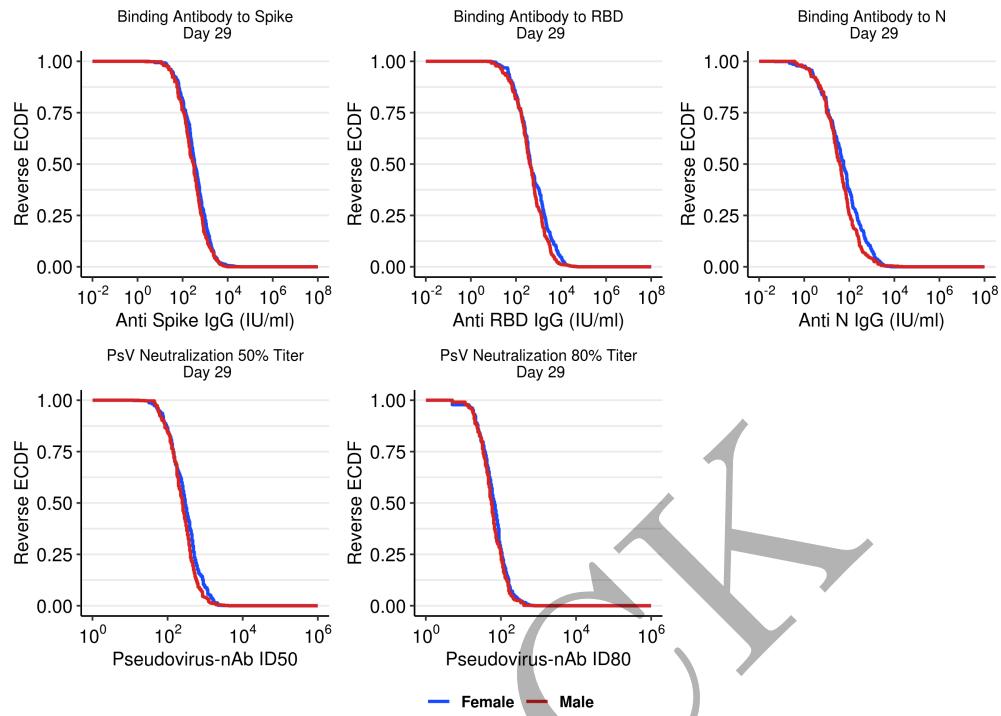


Figure 2.81: RCDF plots for D29 Ab markers: baseline negative vaccine arm by sex assigned at birth.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT553

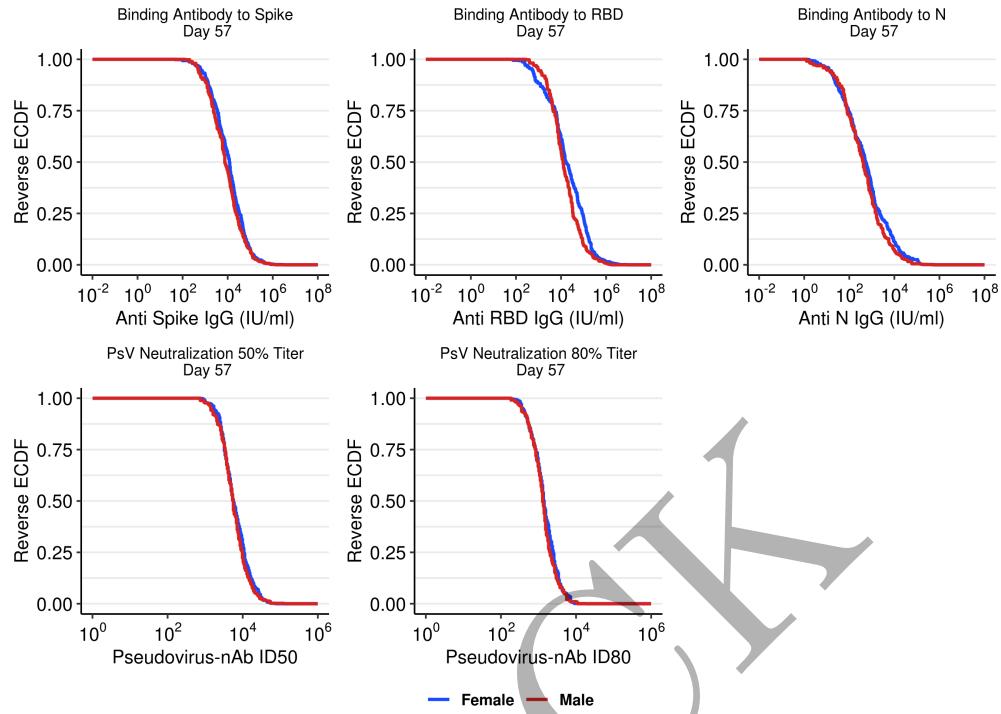


Figure 2.82: RCDF plots for D57 Ab markers: baseline negative vaccine arm by sex assigned at birth.

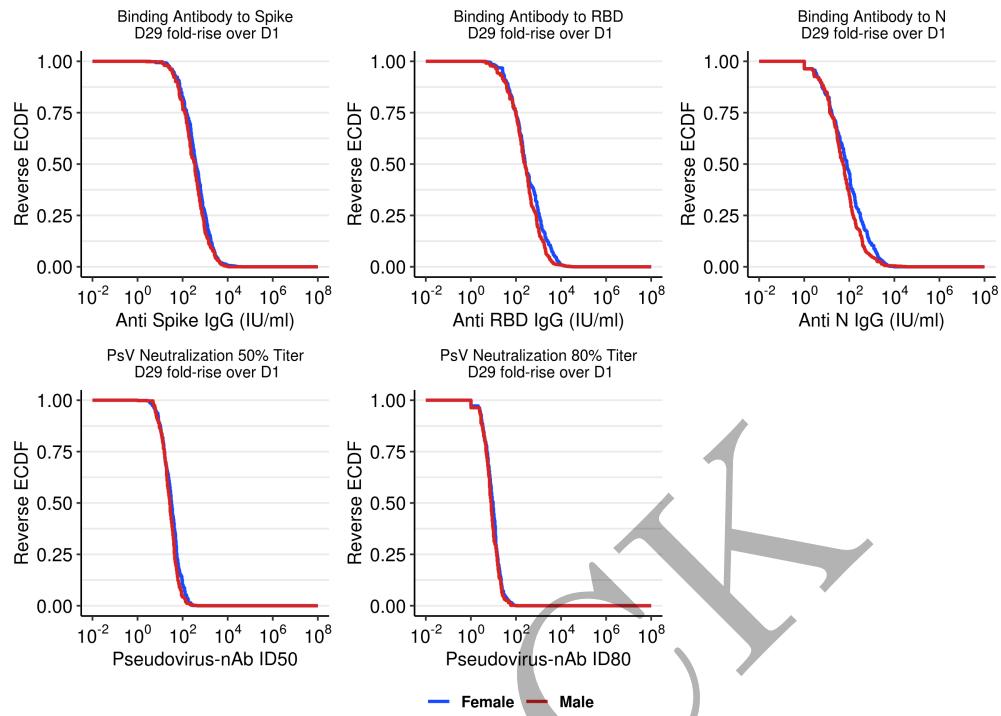


Figure 2.83: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT555

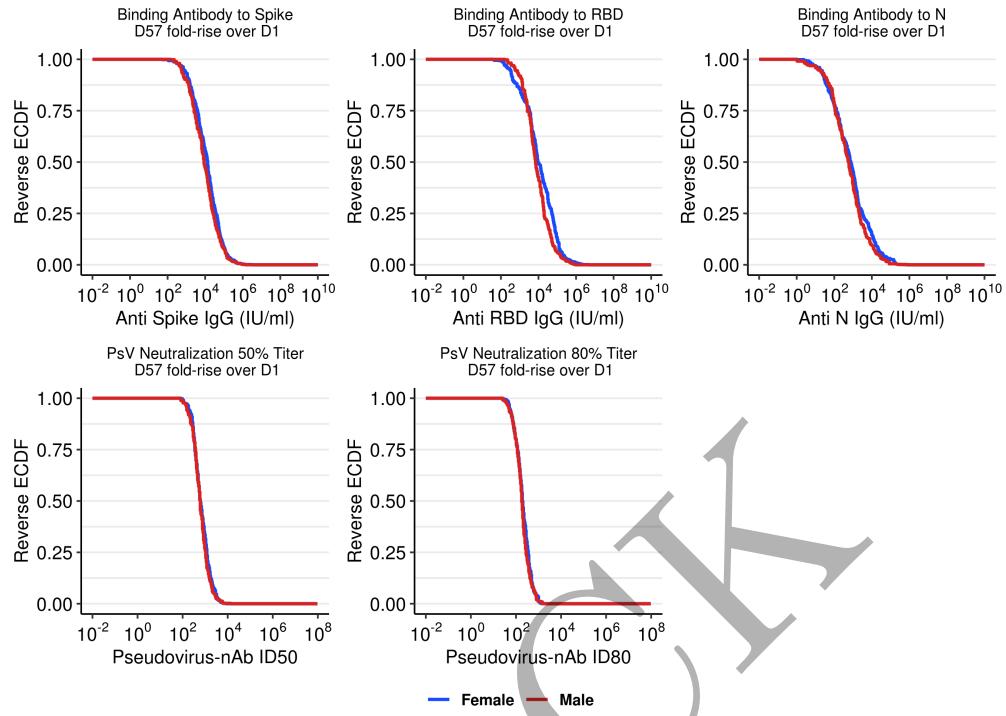


Figure 2.84: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

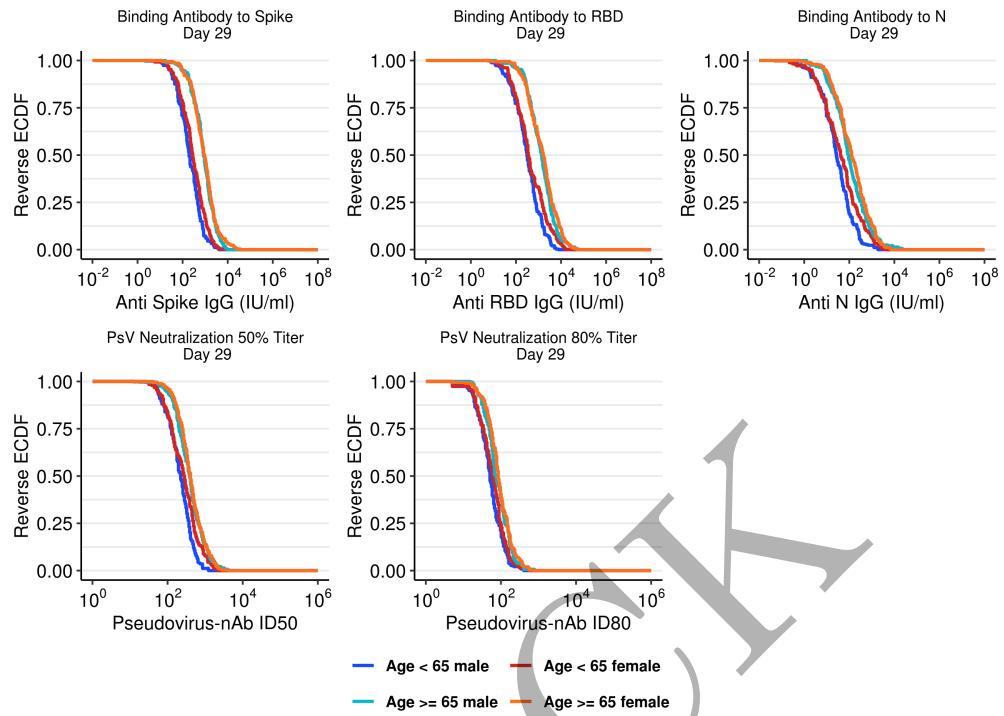


Figure 2.85: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT557

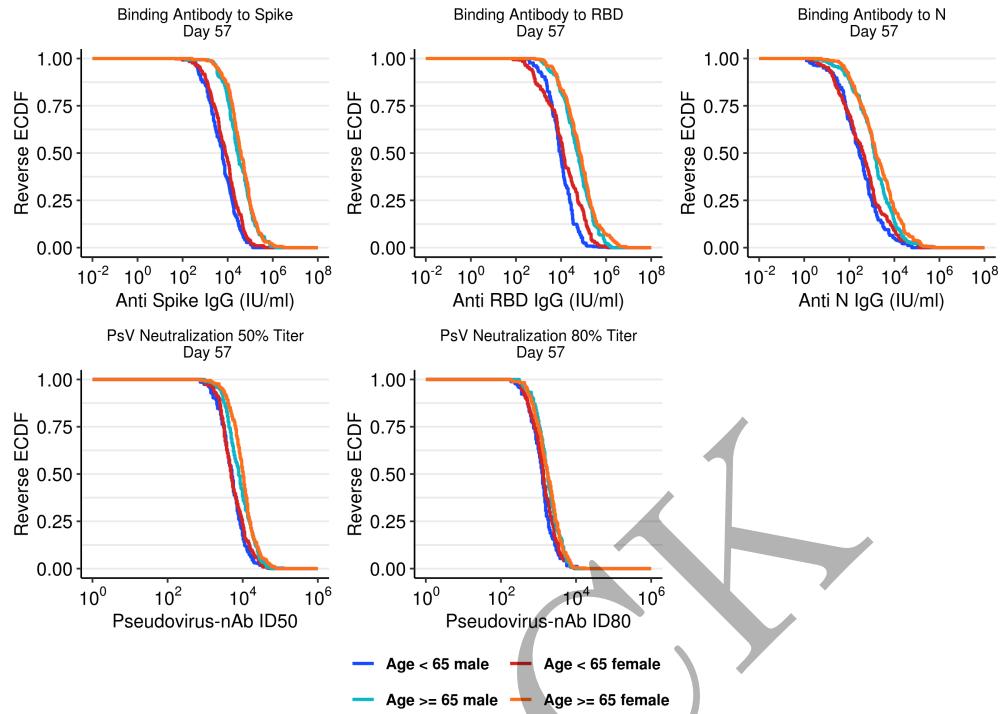


Figure 2.86: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

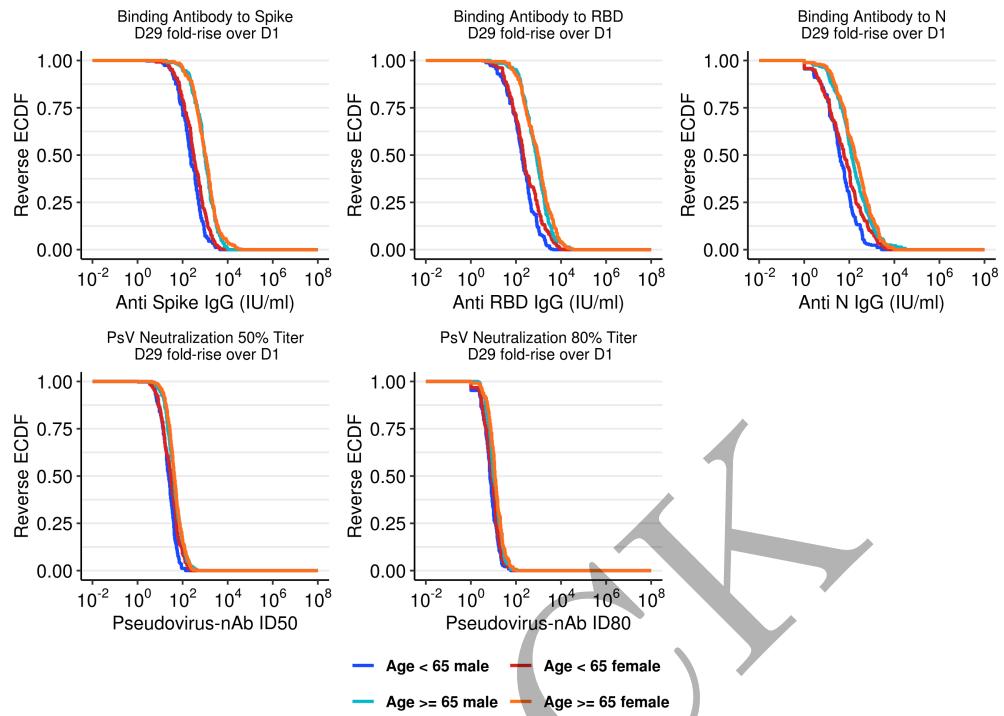


Figure 2.87: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT559

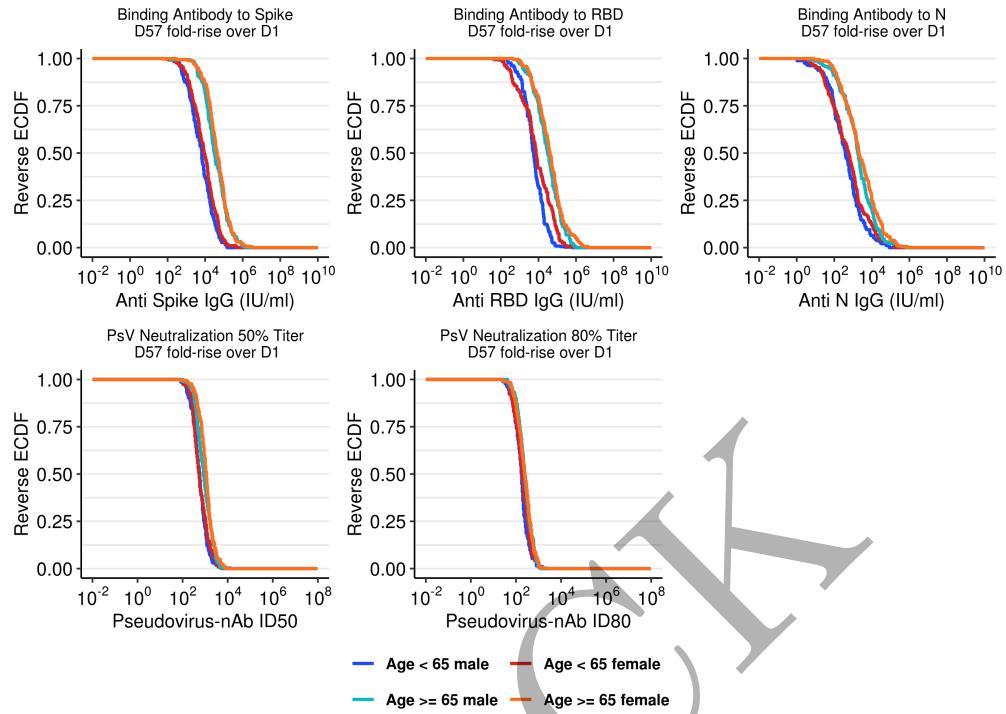


Figure 2.88: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex at birth.

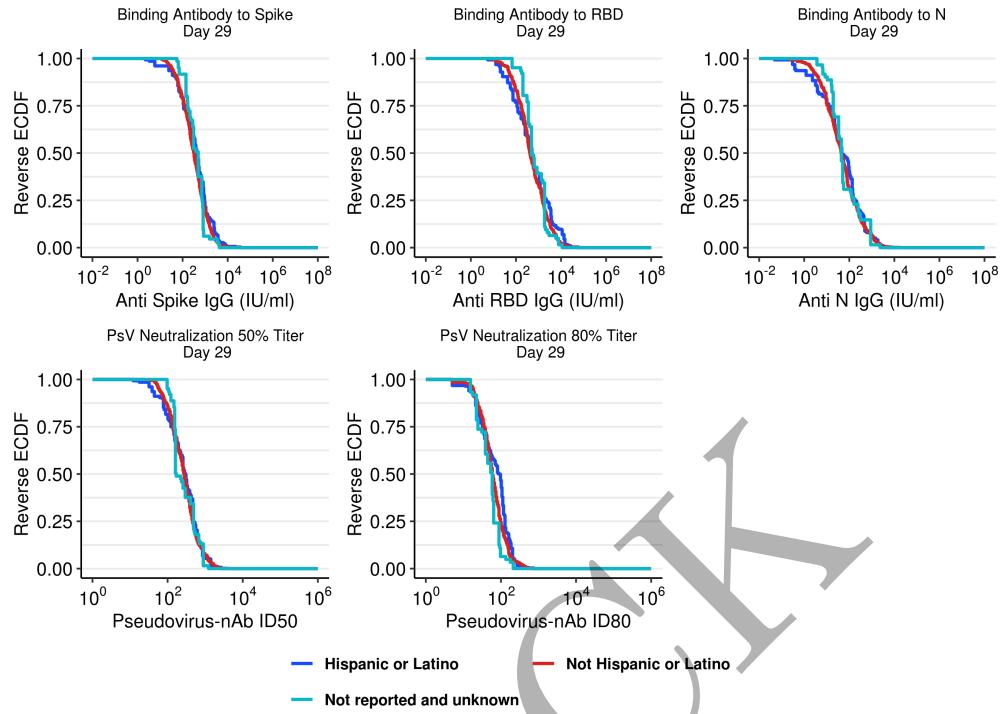


Figure 2.89: RCDF plots for D29 Ab markers: baseline negative vaccine arm by ethnicity.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT561

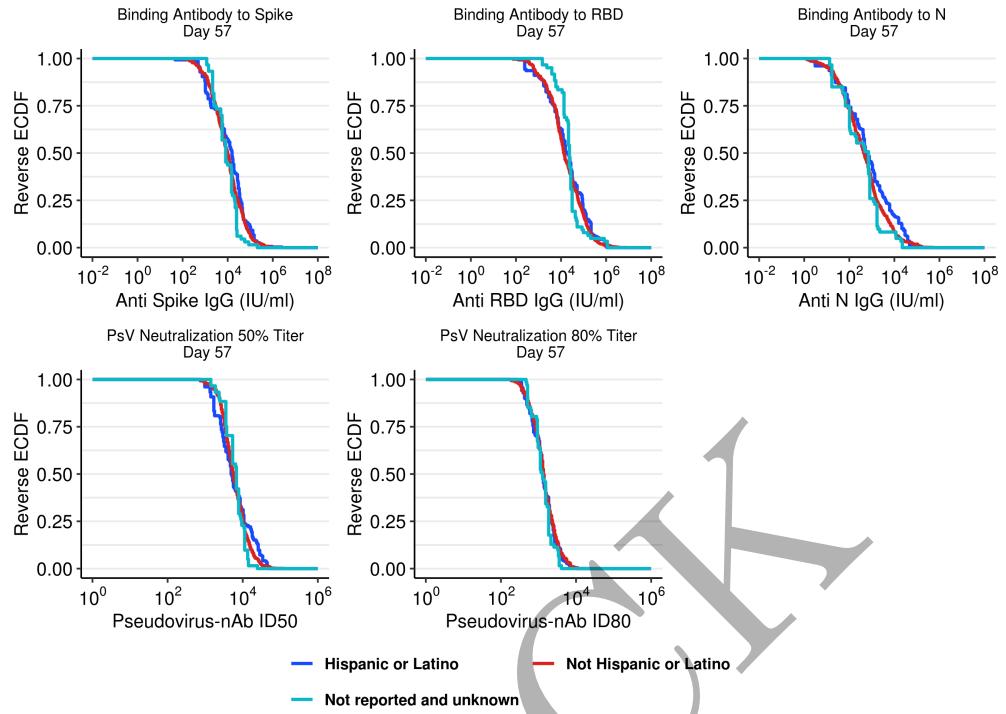


Figure 2.90: RCDF plots for D57 Ab markers: baseline negative vaccine arm by ethnicity.

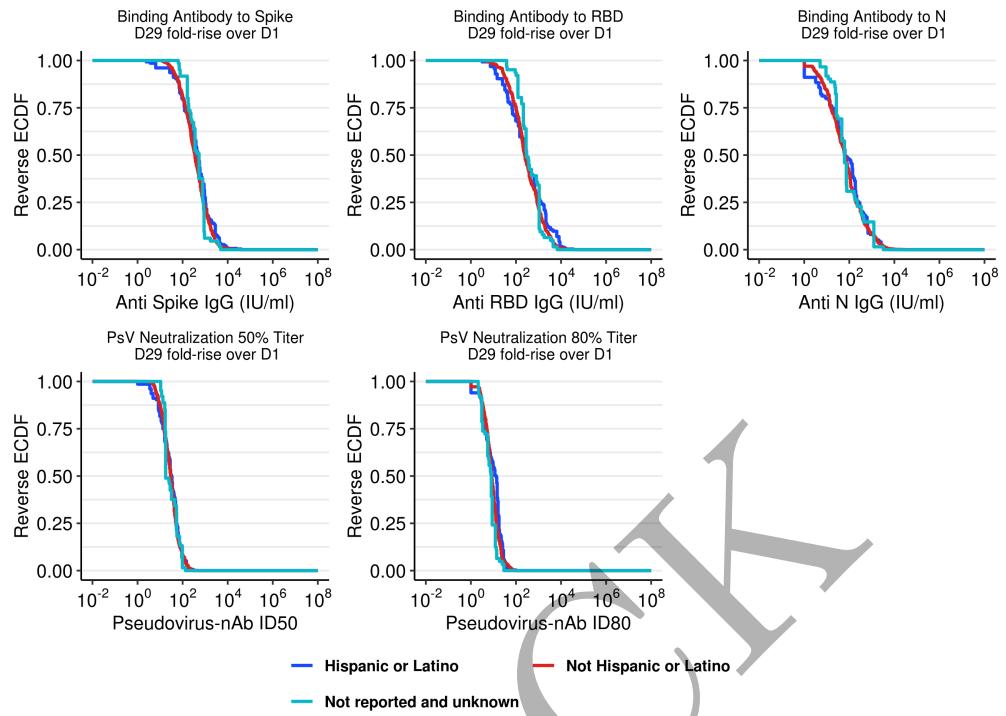


Figure 2.91: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT563

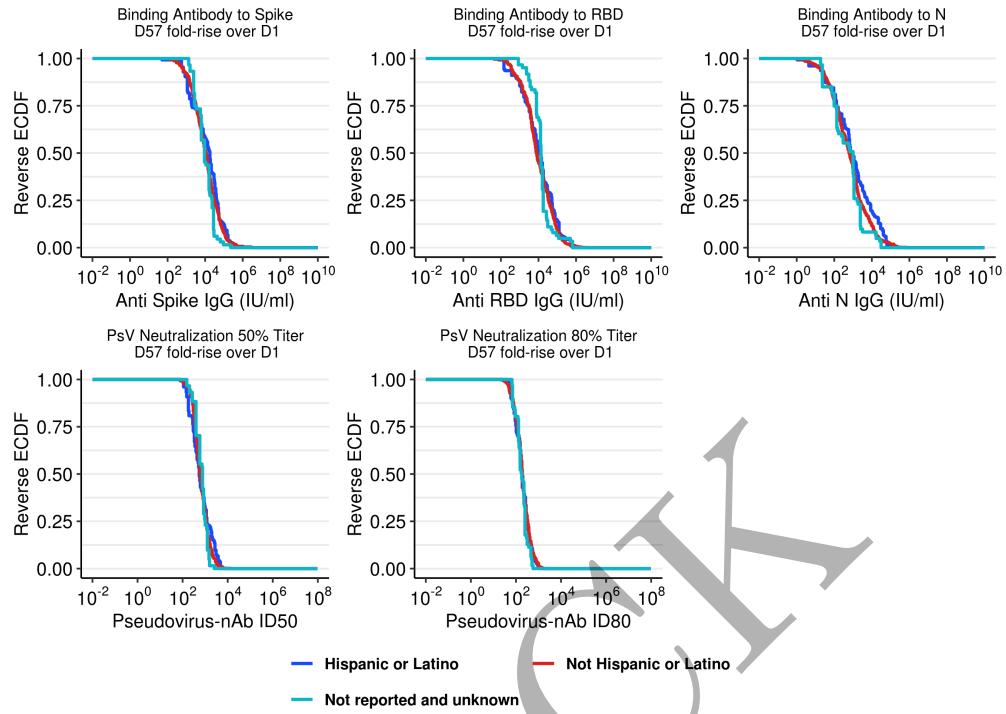


Figure 2.92: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

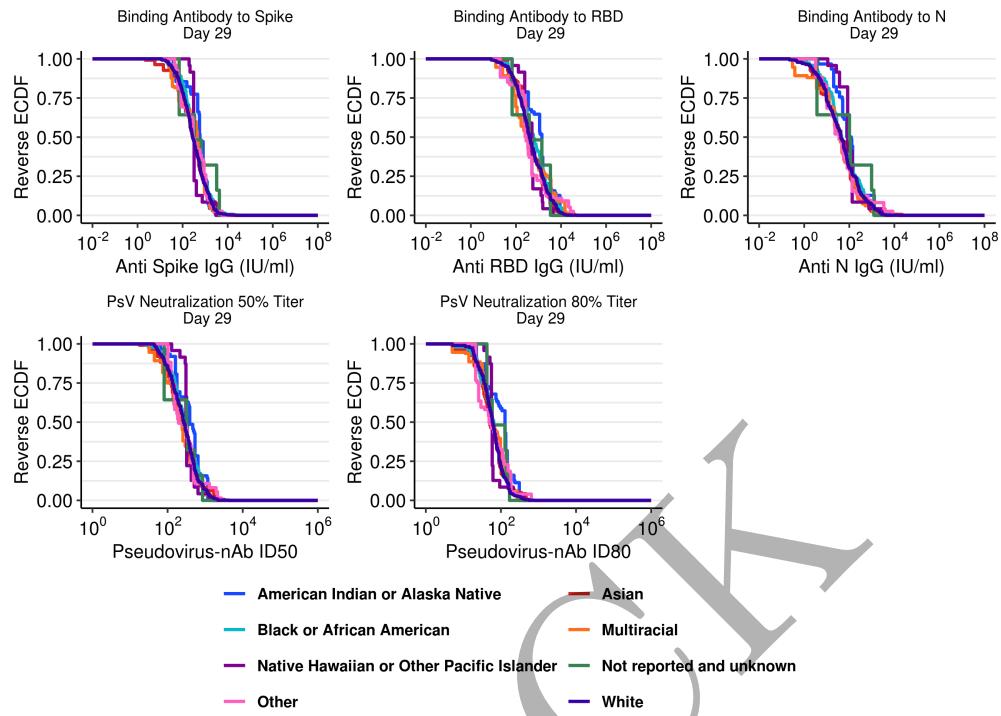


Figure 2.93: RCDF plots for D29 Ab markers: baseline negative vaccine arm by race.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT565

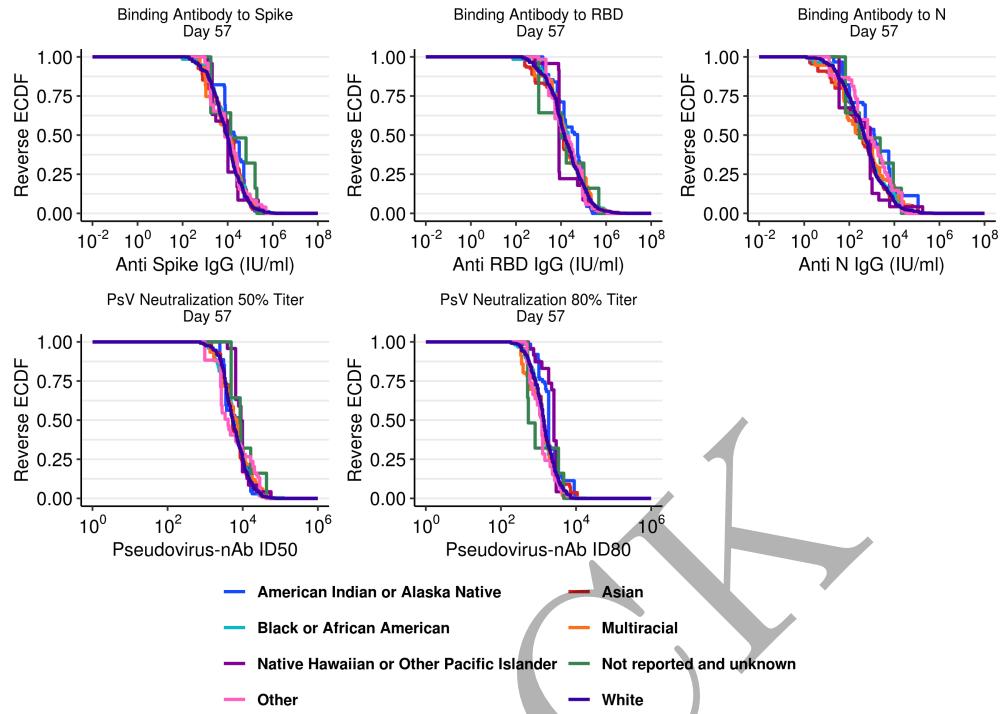


Figure 2.94: RCDF plots for D57 Ab markers: baseline negative vaccine arm by race.

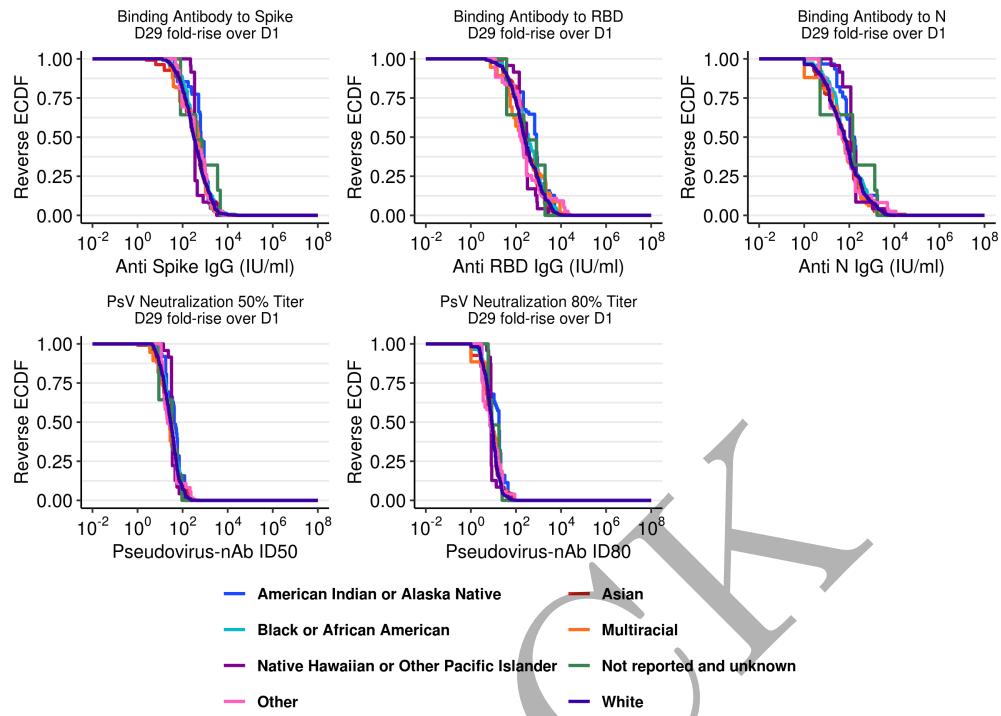


Figure 2.95: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT567

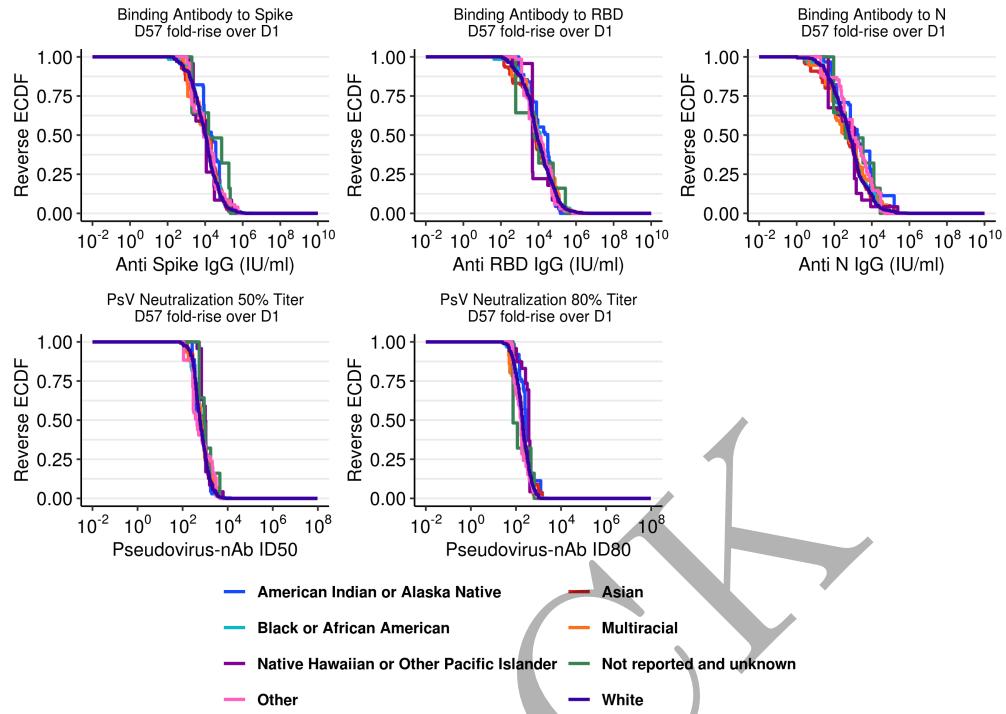


Figure 2.96: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

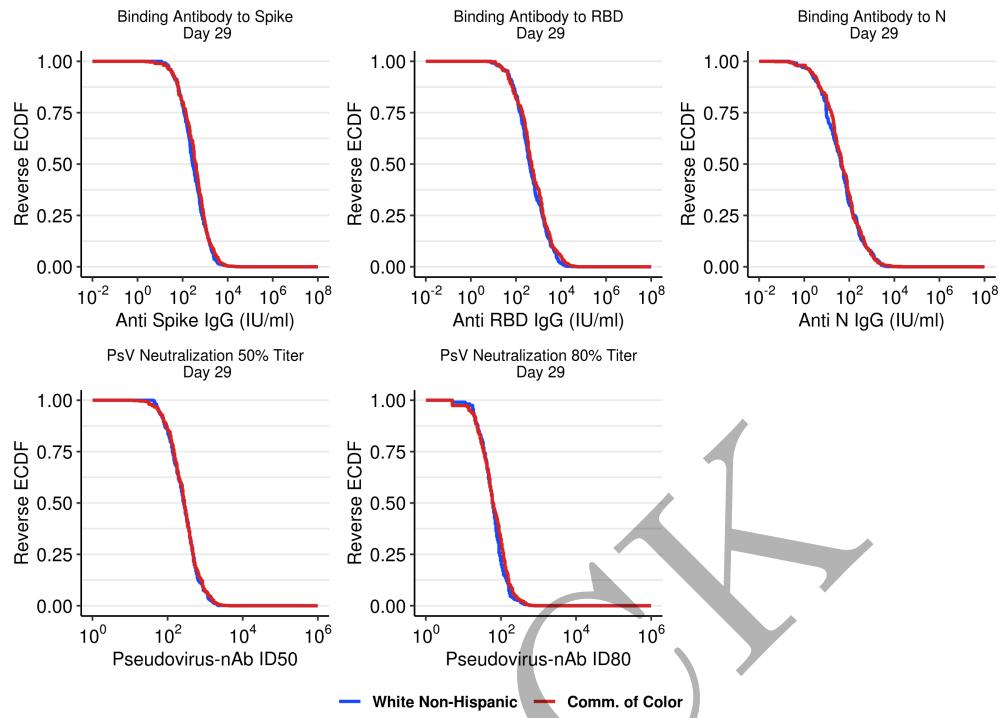


Figure 2.97: RCDF plots for D29 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT569

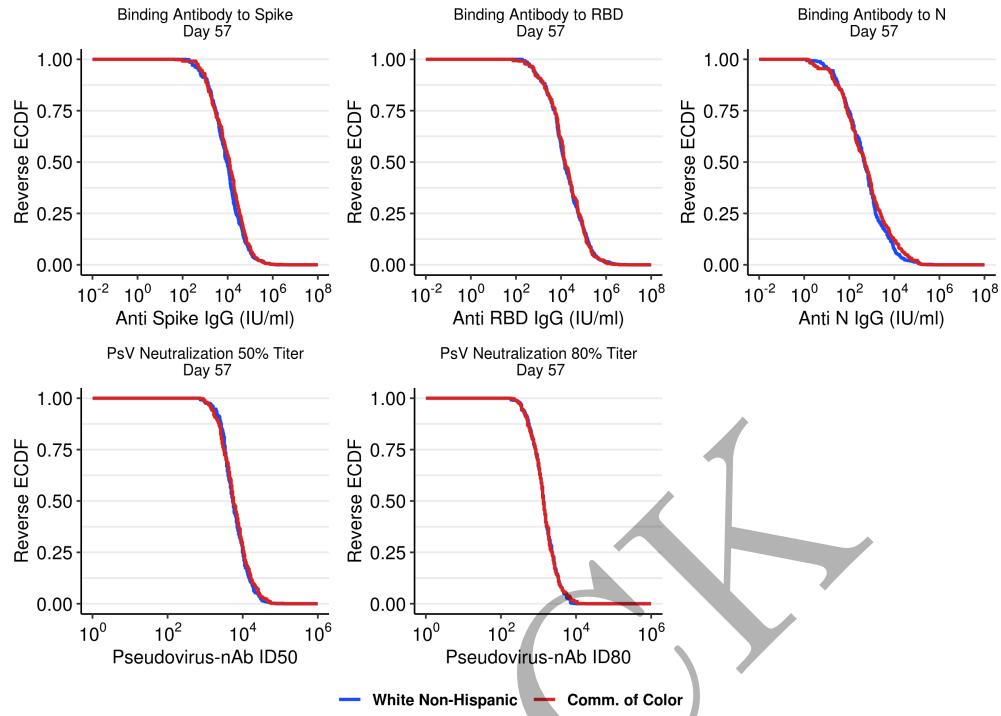


Figure 2.98: RCDF plots for D57 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

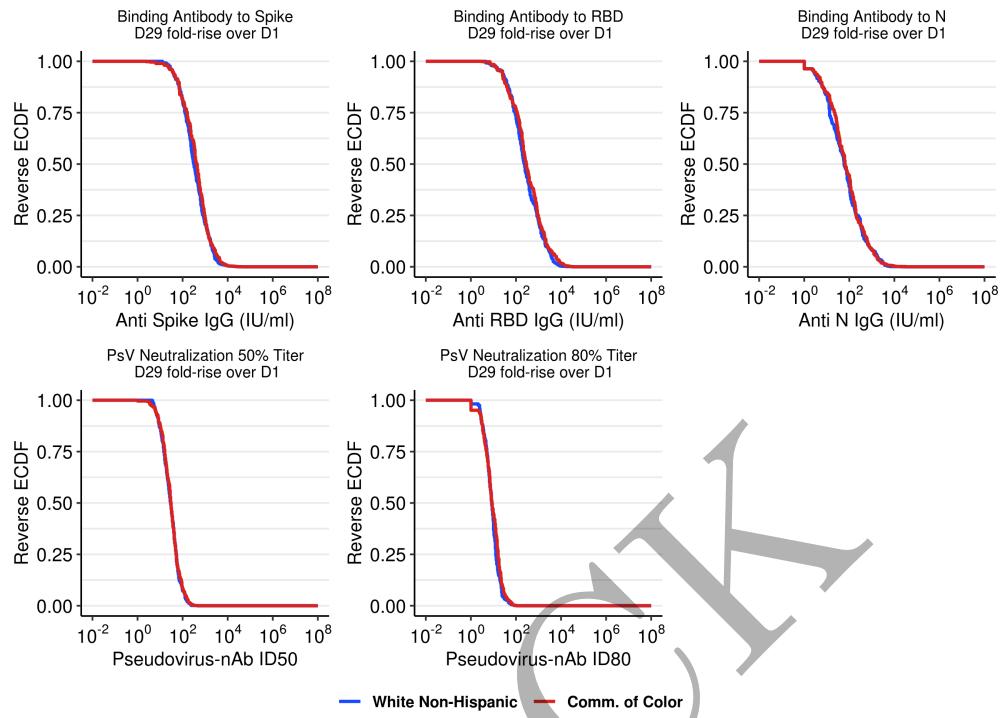


Figure 2.99: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT571

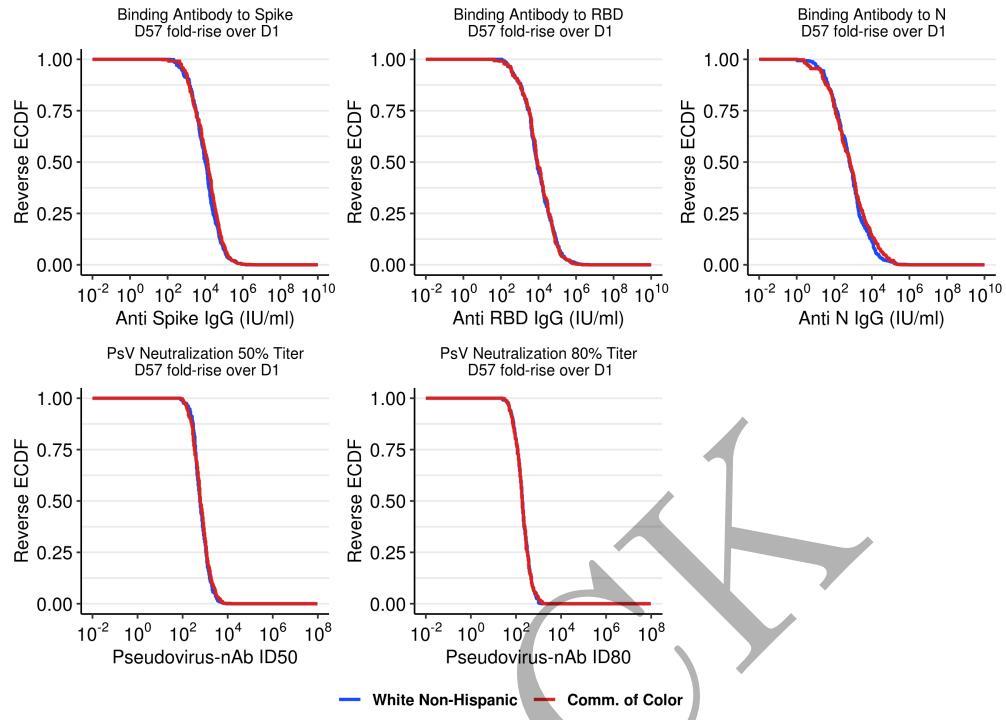


Figure 2.100: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

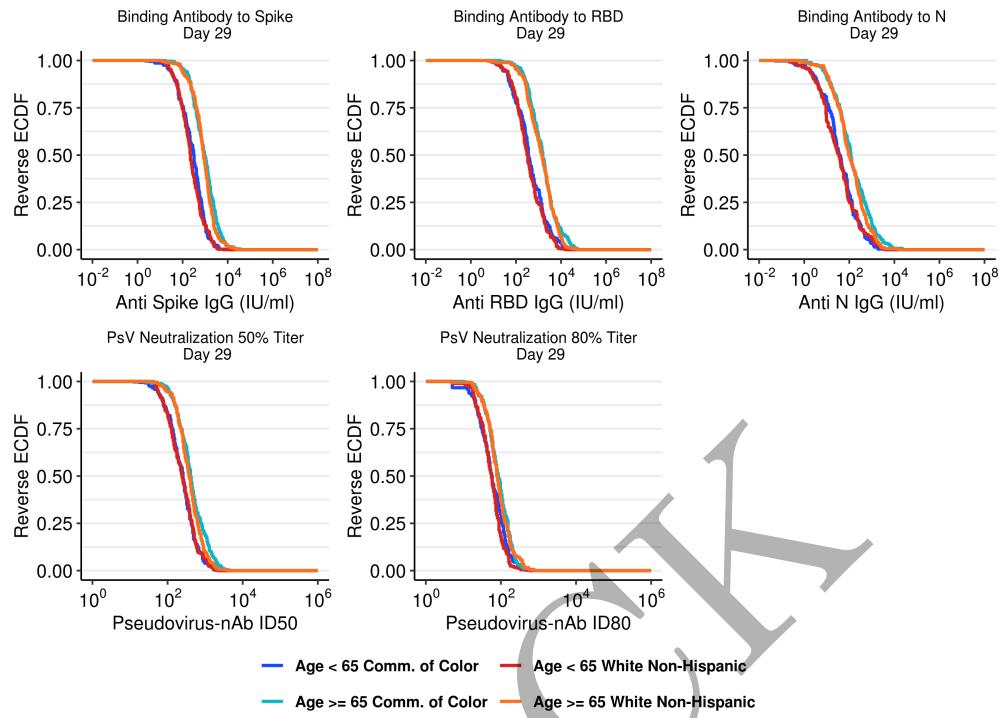


Figure 2.101: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT573

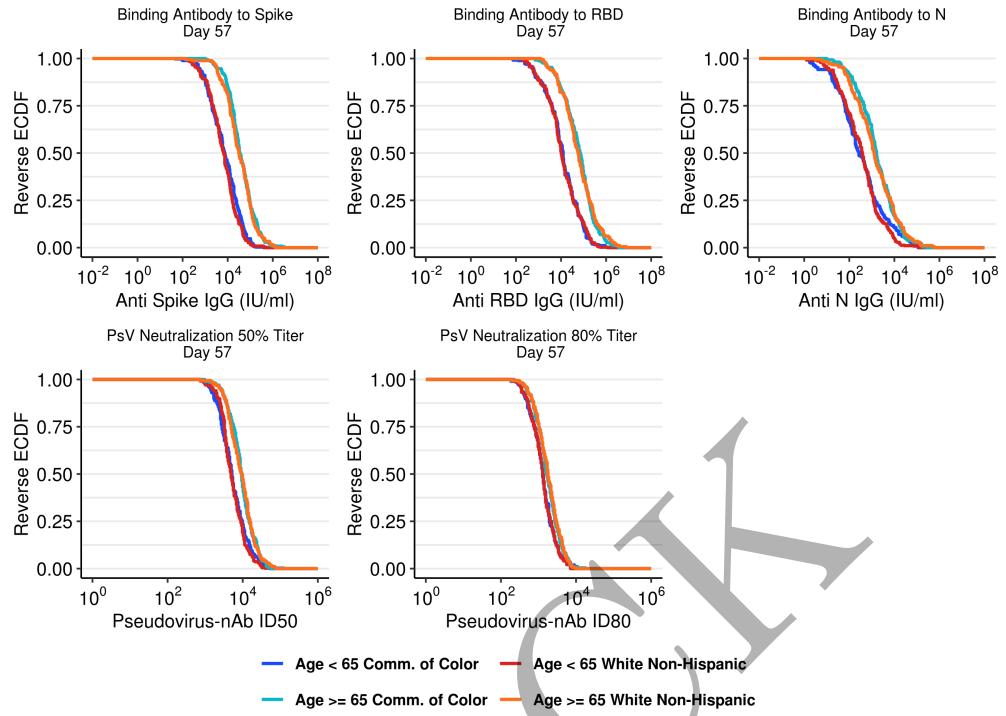


Figure 2.102: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

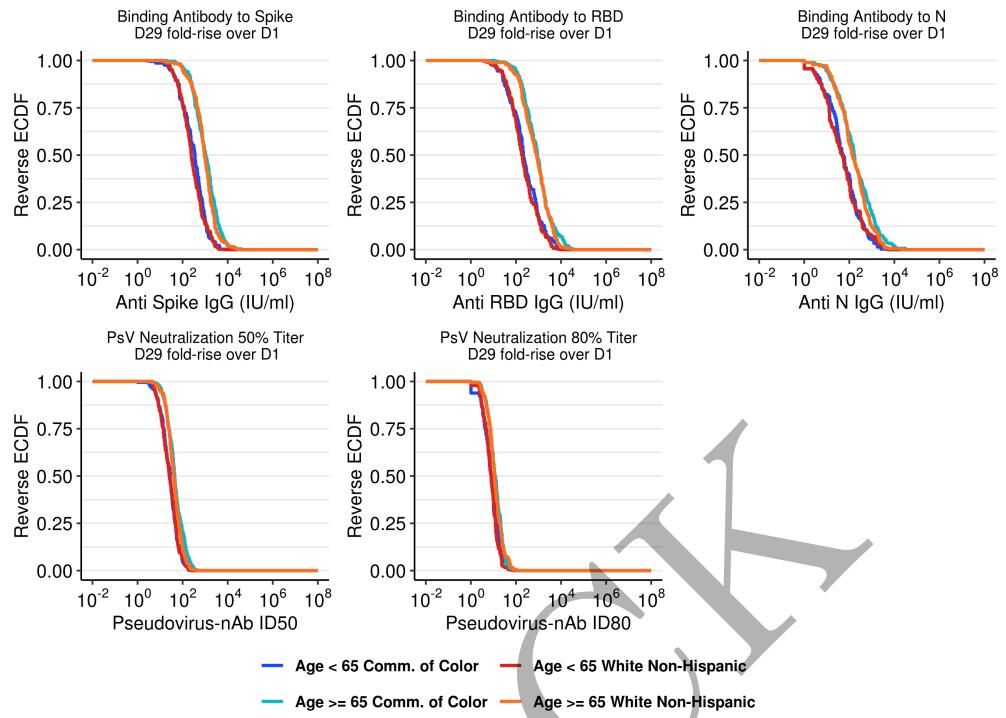


Figure 2.103: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT575

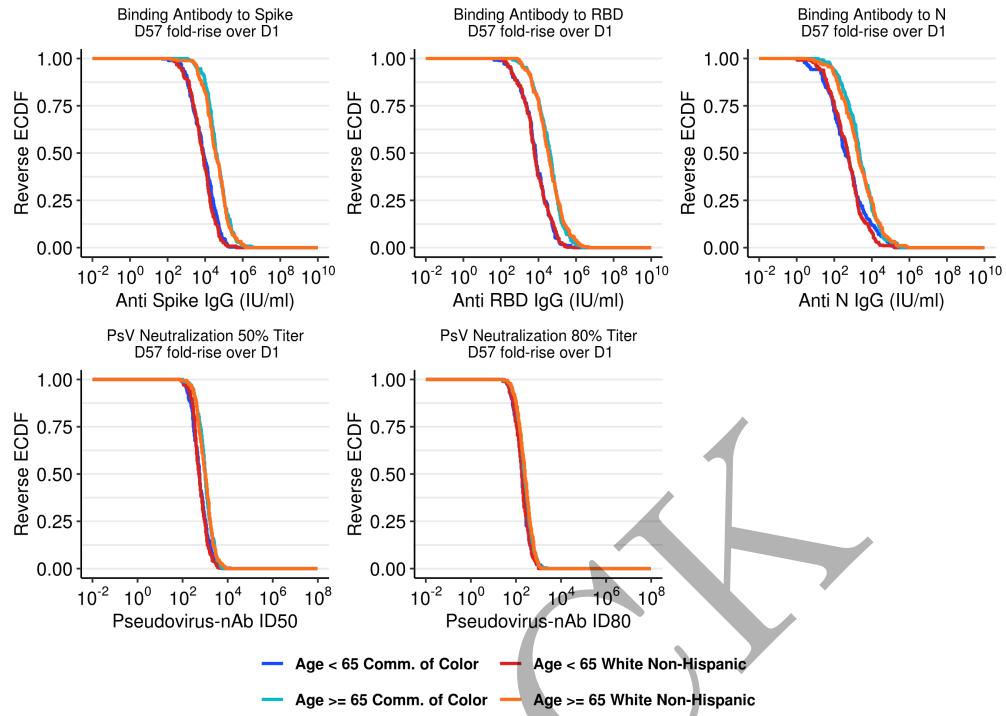


Figure 2.104: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

2.6.2 Baseline SARS-CoV-2 positive

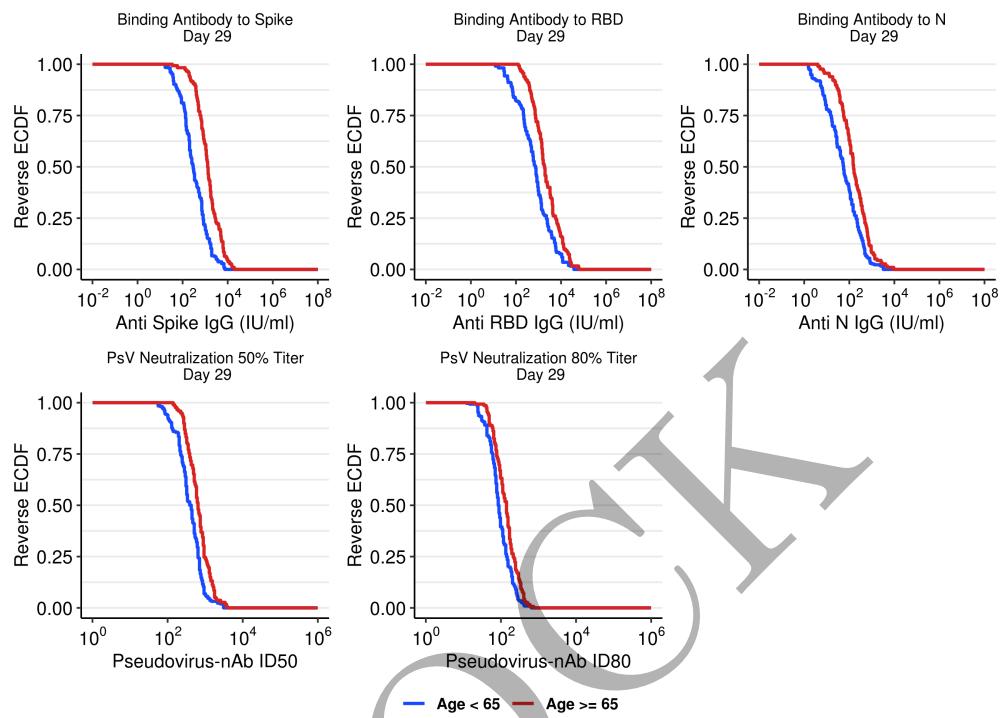


Figure 2.105: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age groups.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT577

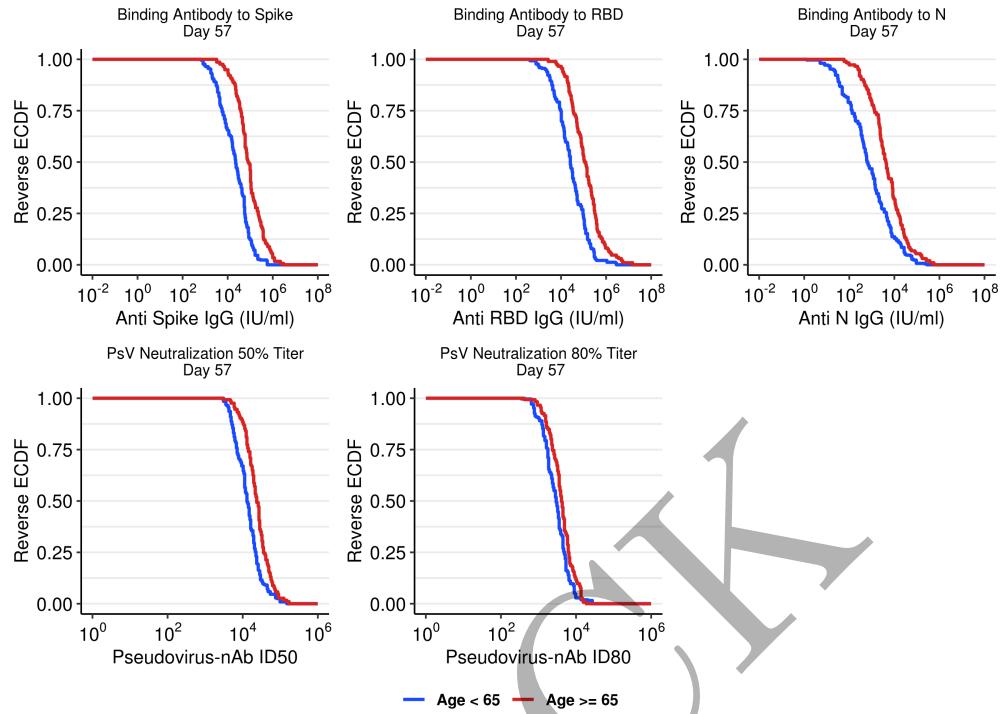


Figure 2.106: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age groups.

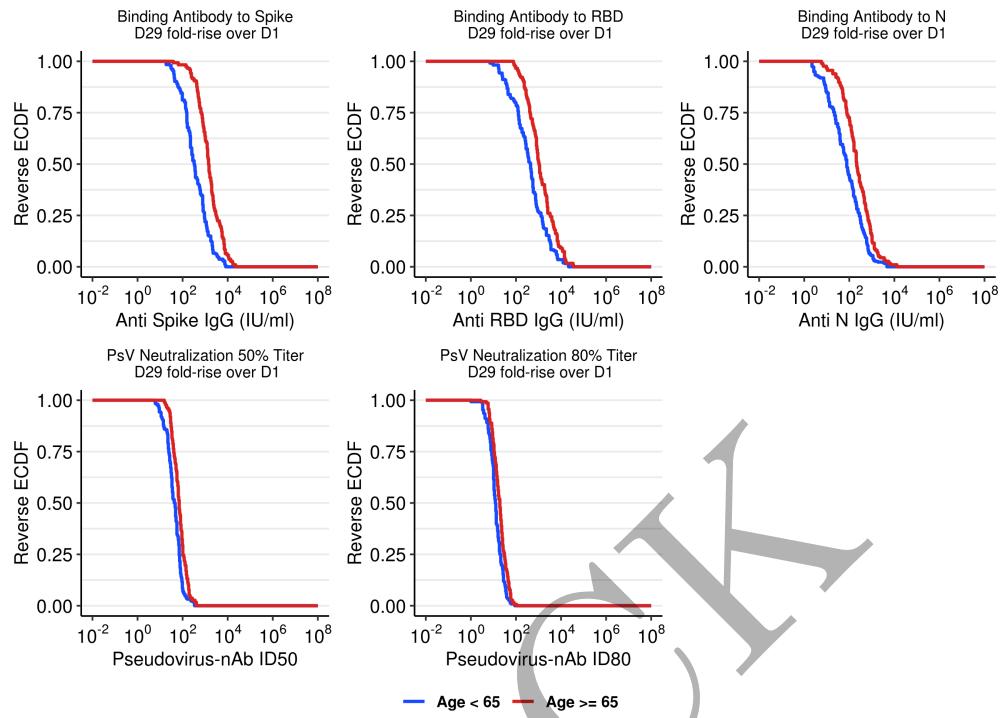


Figure 2.107: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT579

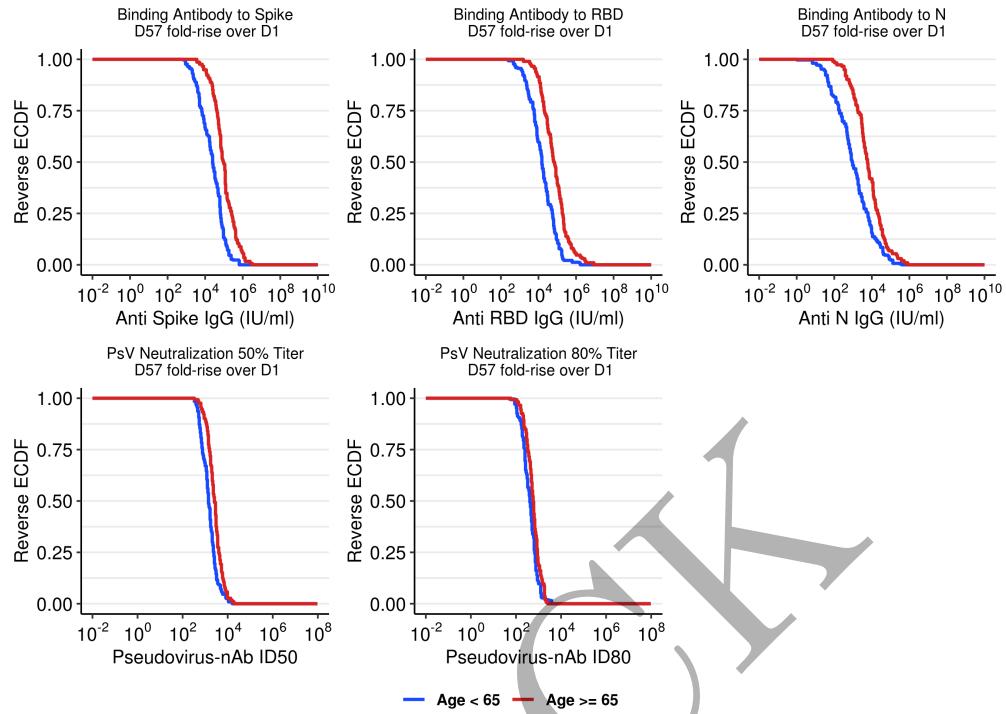


Figure 2.108: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

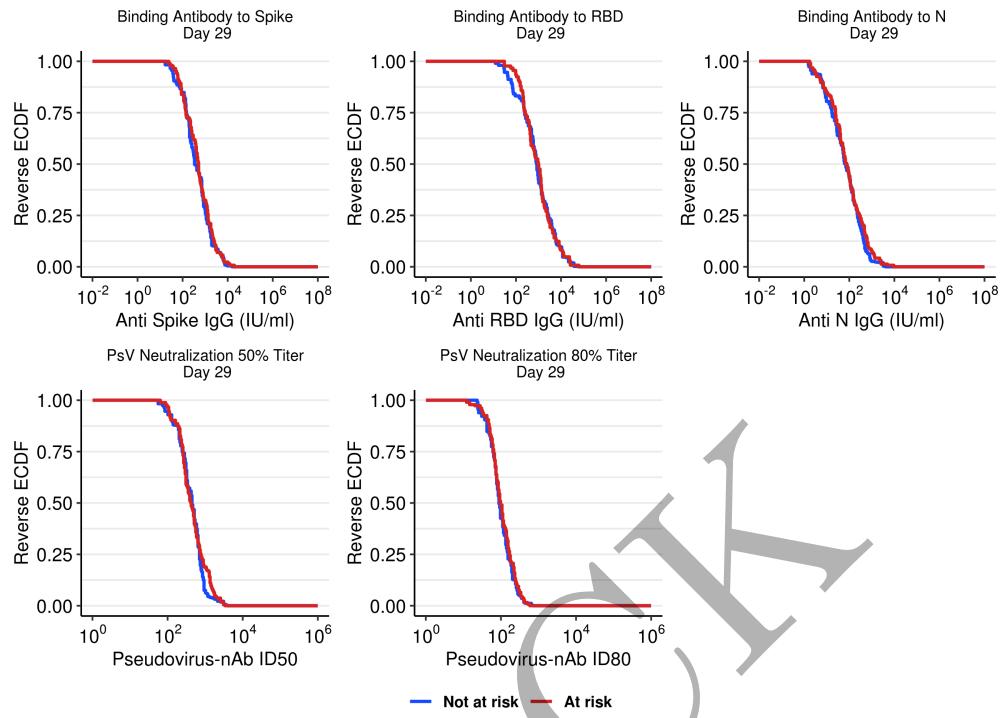


Figure 2.109: RCDF plots for D29 Ab markers: baseline positive vaccine arm by high-risk condition.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT581

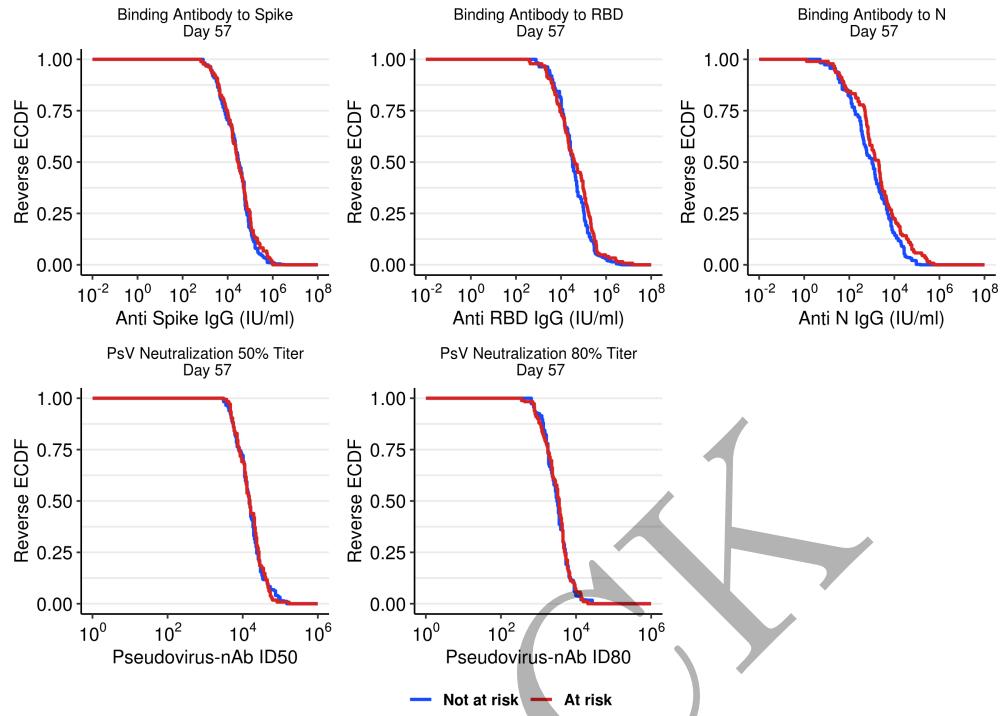


Figure 2.110: RCDF plots for D57 Ab markers: baseline positive vaccine arm by high-risk condition.

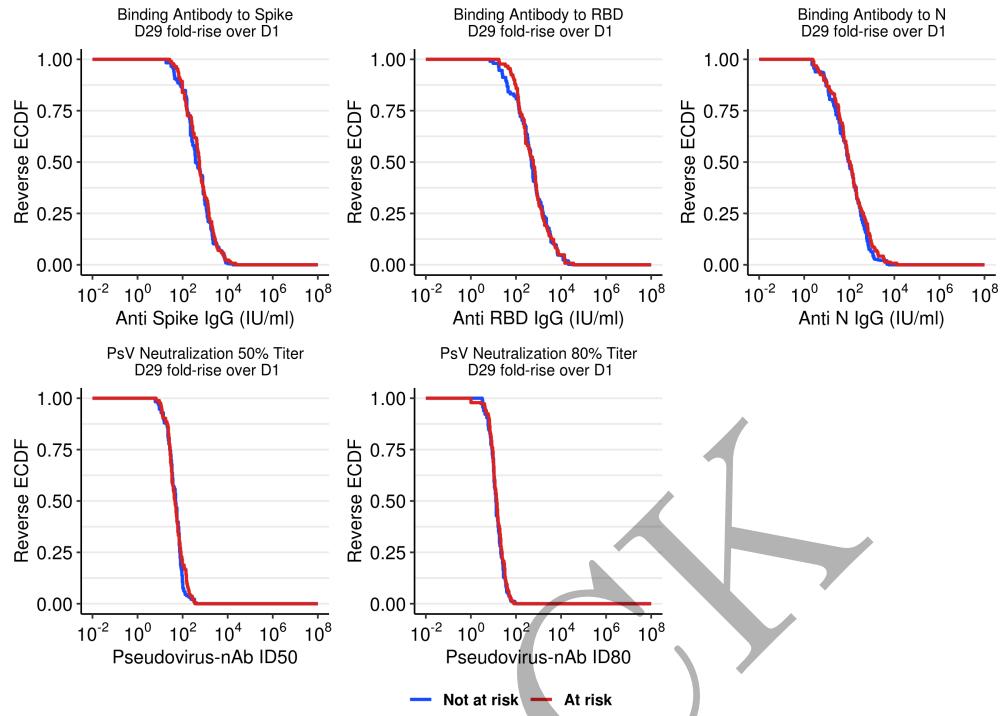


Figure 2.111: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT583

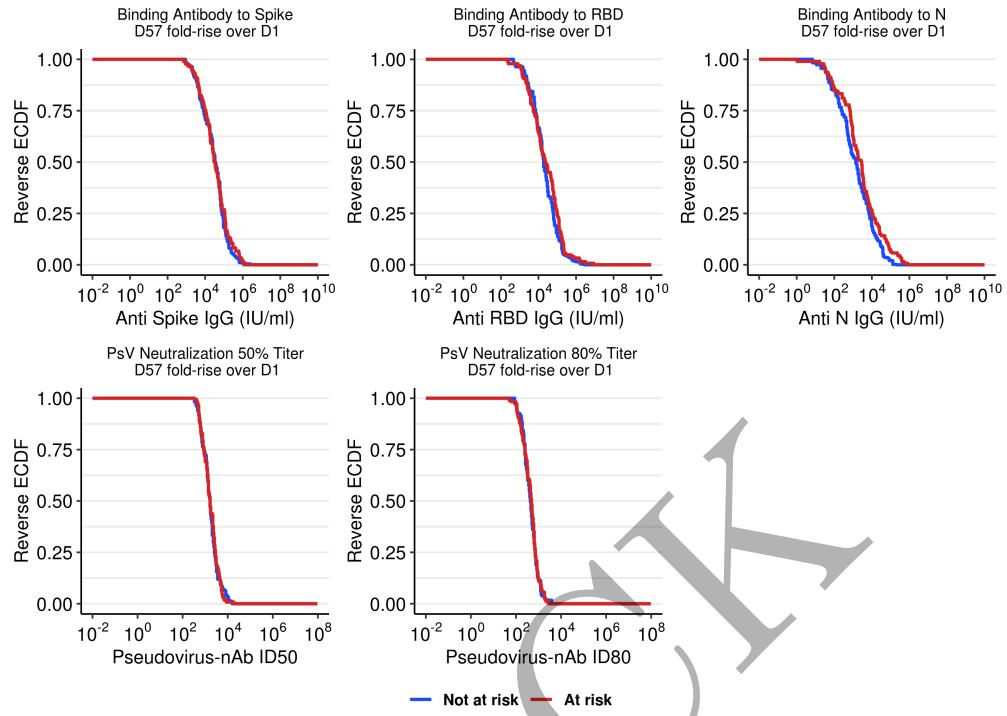


Figure 2.112: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

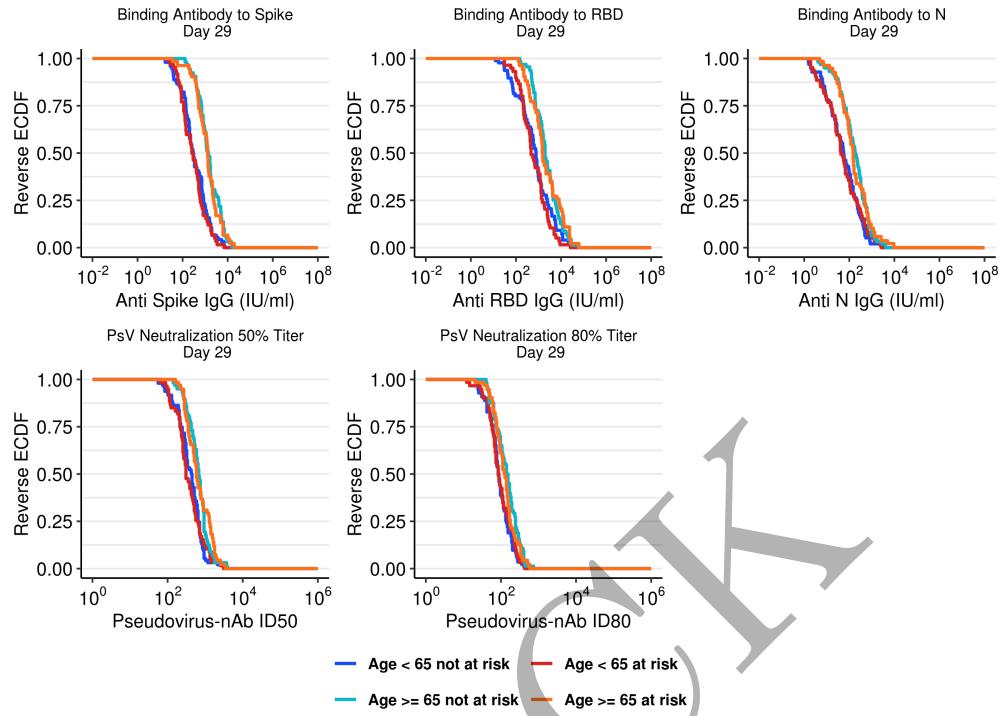


Figure 2.113: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and high-risk condition.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT585

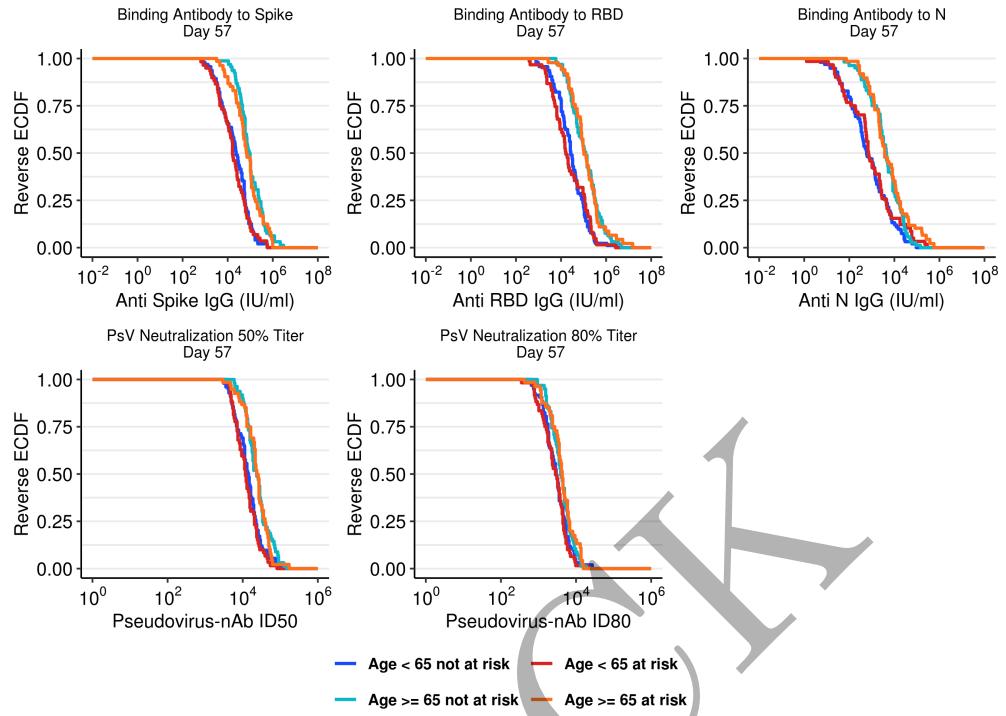


Figure 2.114: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and high-risk condition.

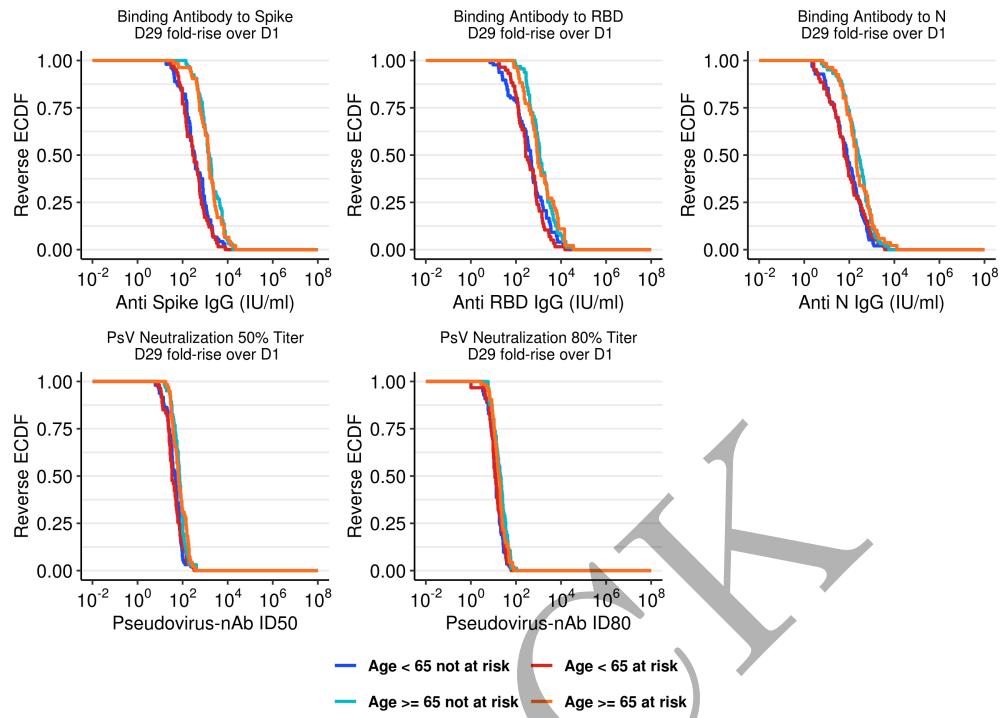


Figure 2.115: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT587

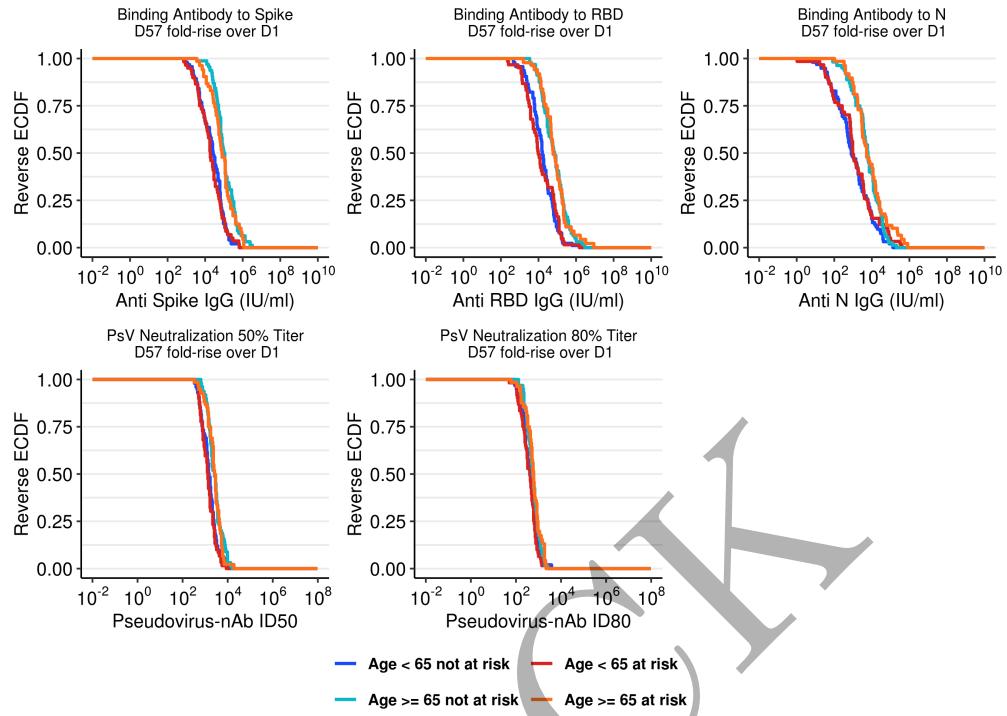


Figure 2.116: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

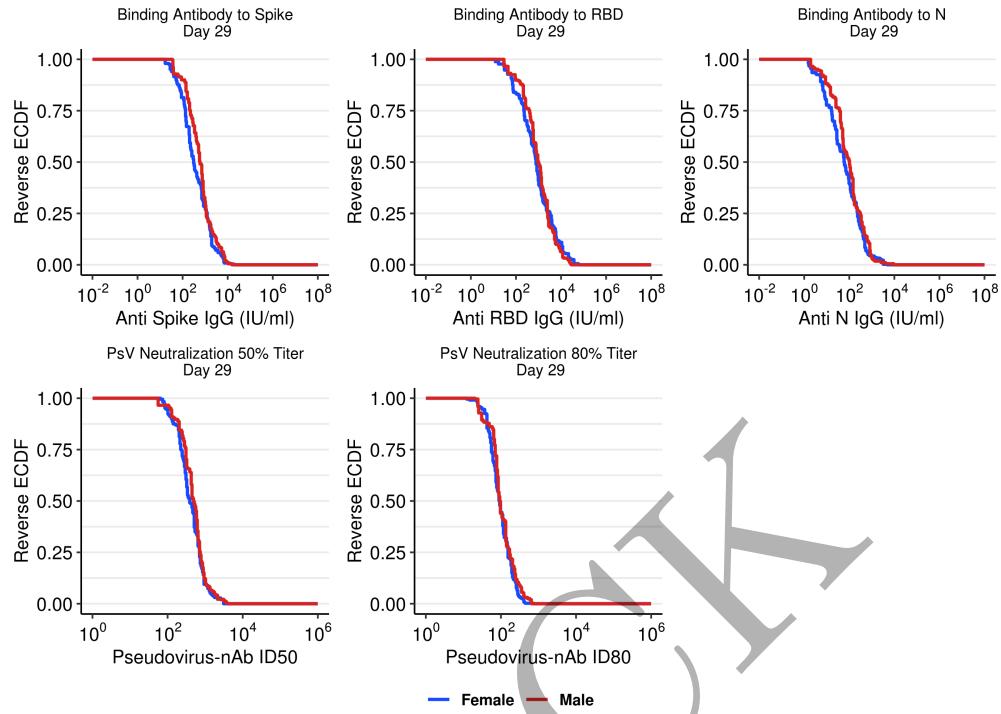


Figure 2.117: RCDF plots for D29 Ab markers: baseline positive vaccine arm by sex assigned at birth.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT589

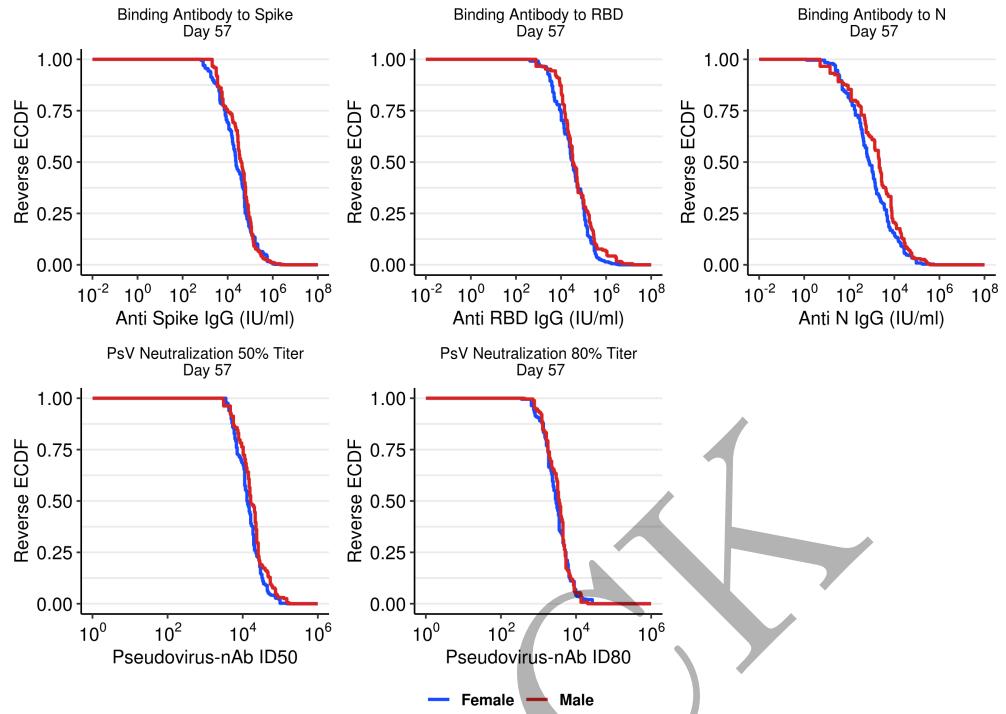


Figure 2.118: RCDF plots for D57 Ab markers: baseline positive vaccine arm by sex assigned at birth.

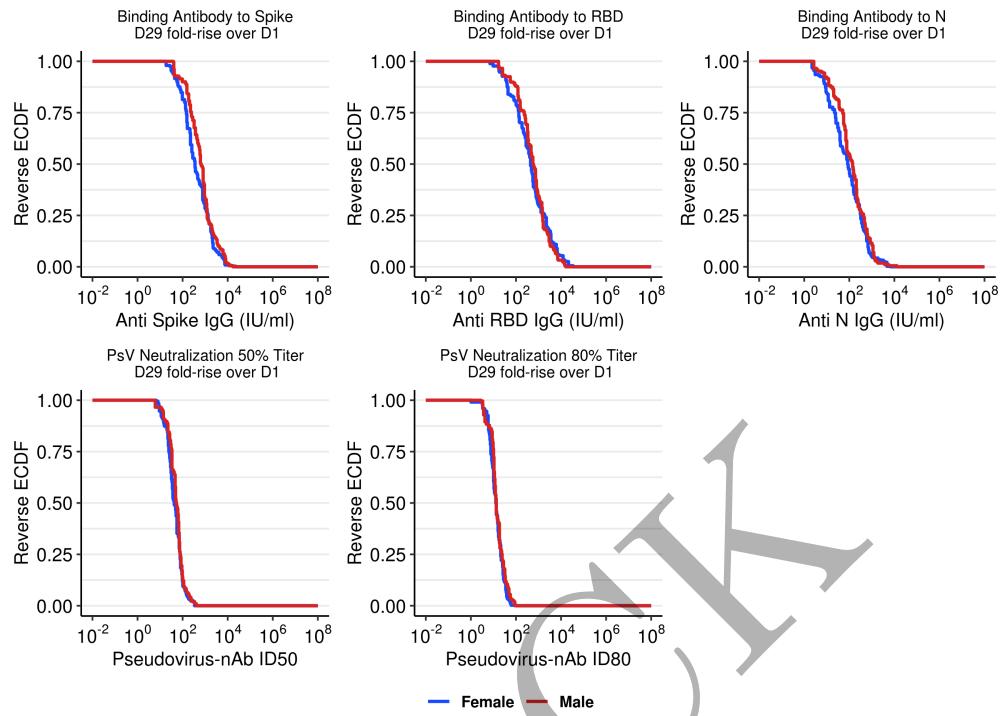


Figure 2.119: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT591

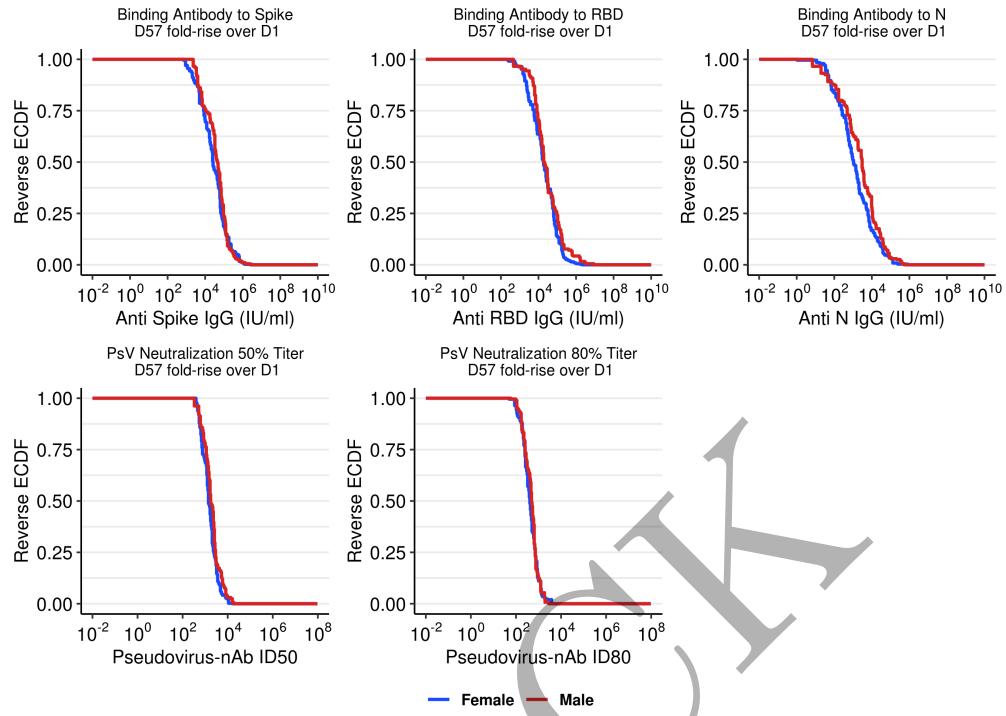


Figure 2.120: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

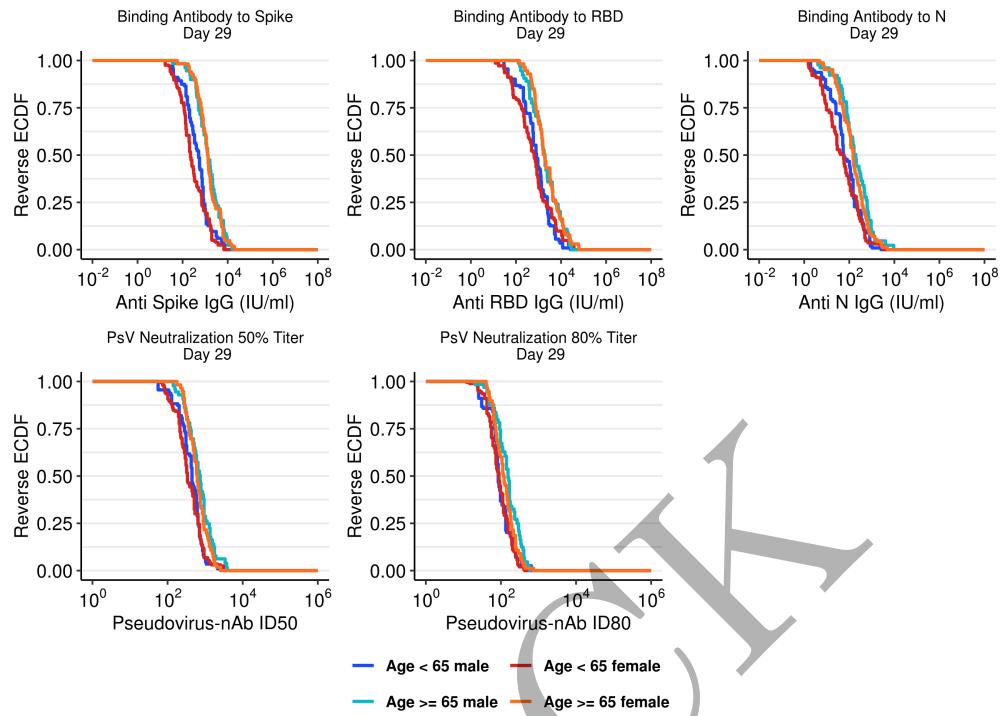


Figure 2.121: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT593

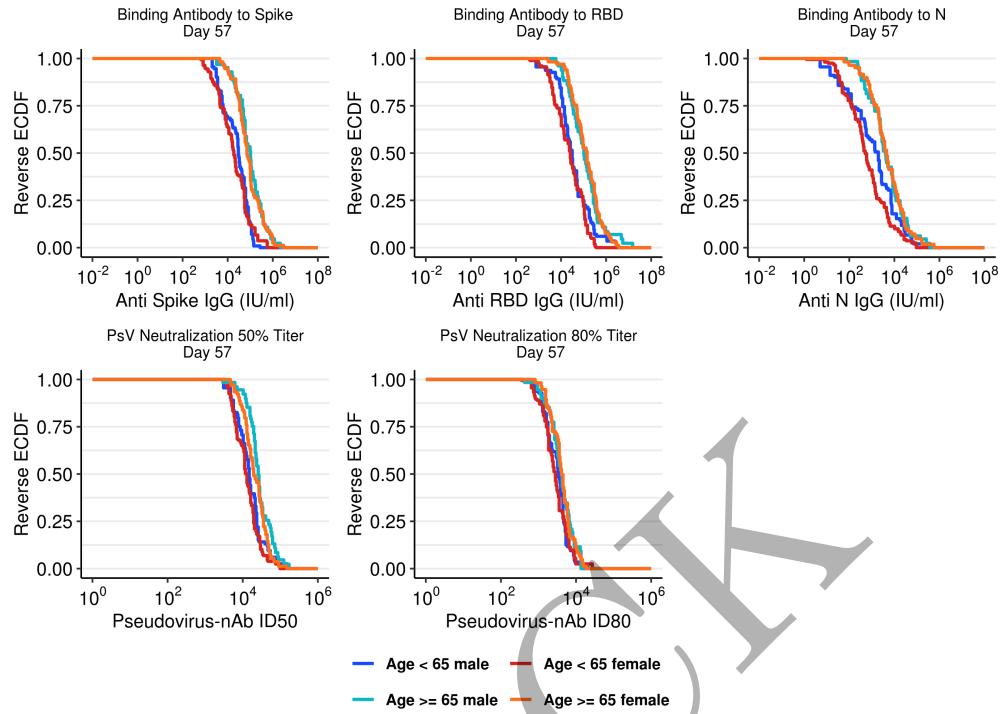


Figure 2.122: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

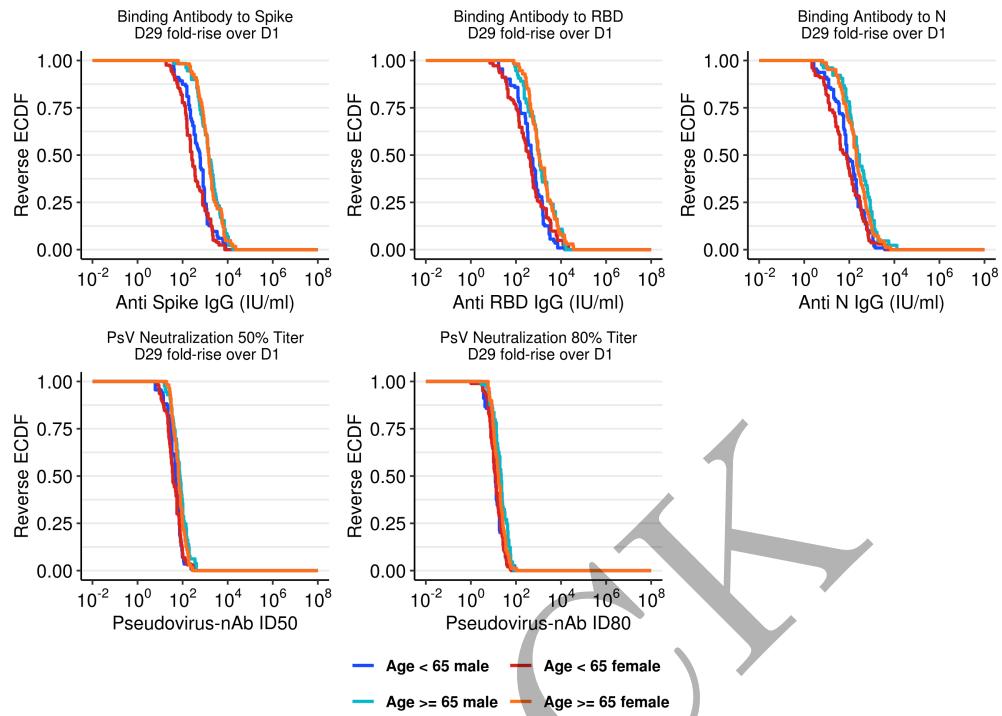


Figure 2.123: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT595

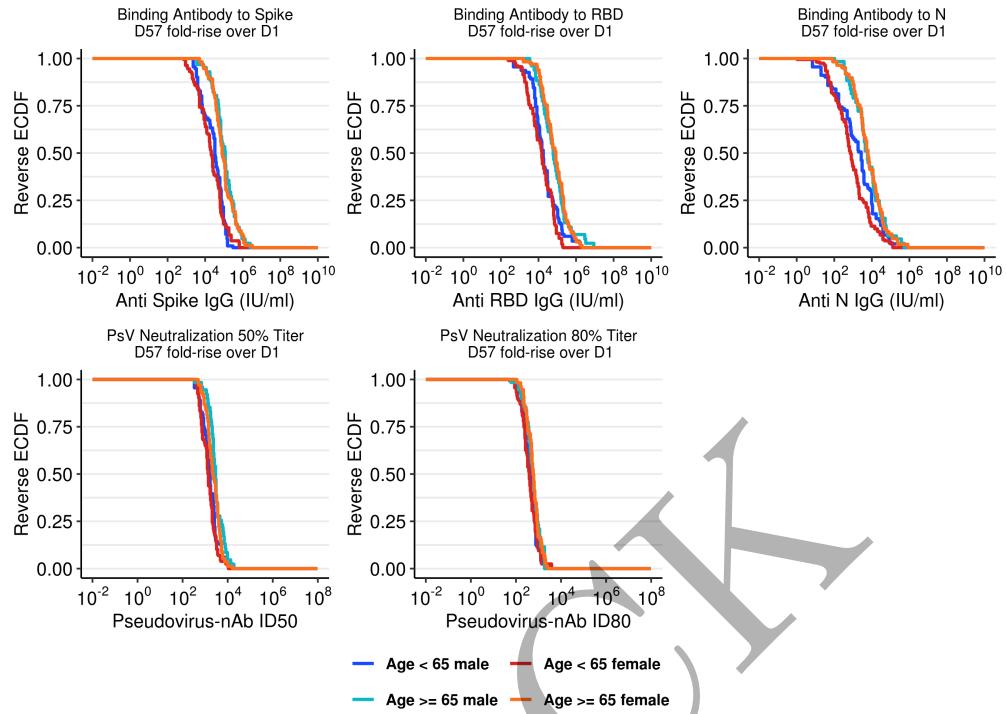


Figure 2.124: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

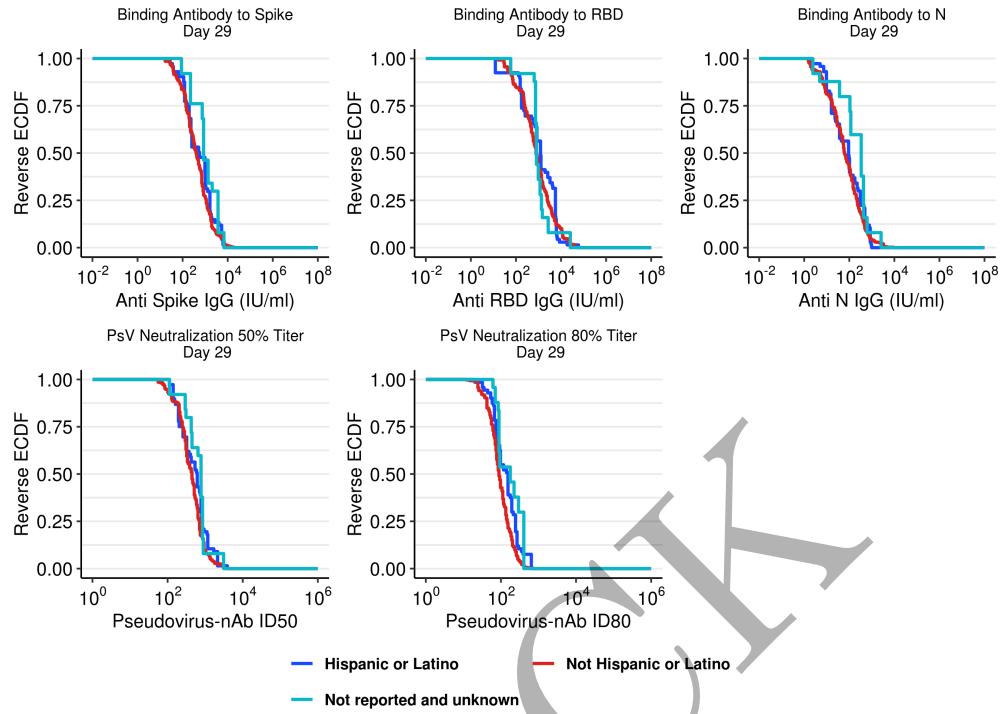


Figure 2.125: RCDF plots for D29 Ab markers: baseline positive vaccine arm by ethnicity.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT597

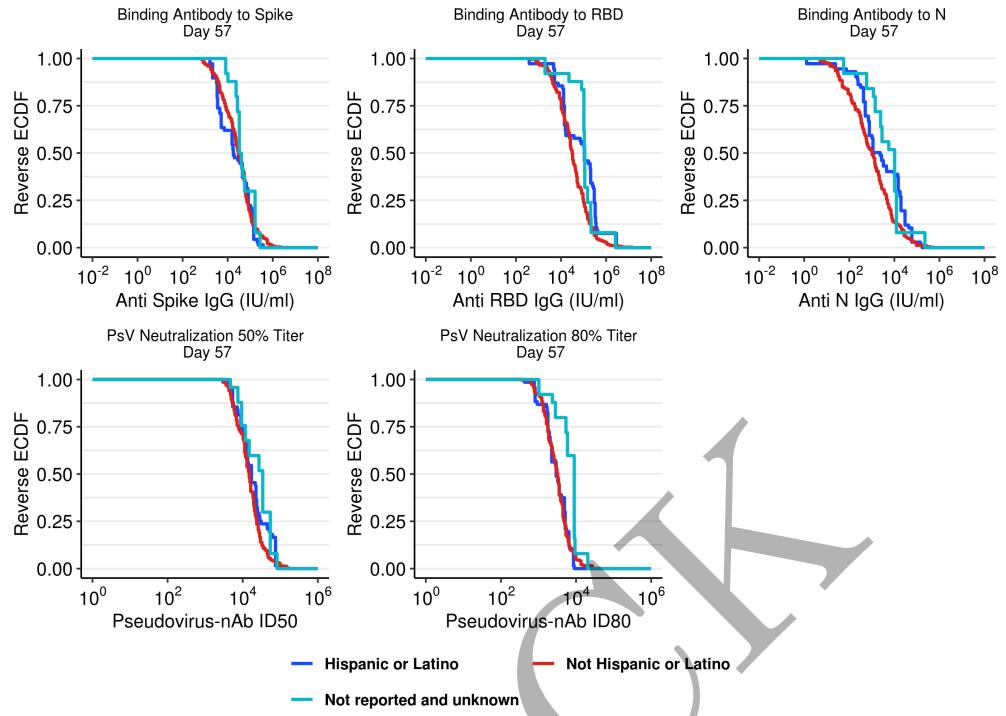


Figure 2.126: RCDF plots for D57 Ab markers: baseline positive vaccine arm by ethnicity.

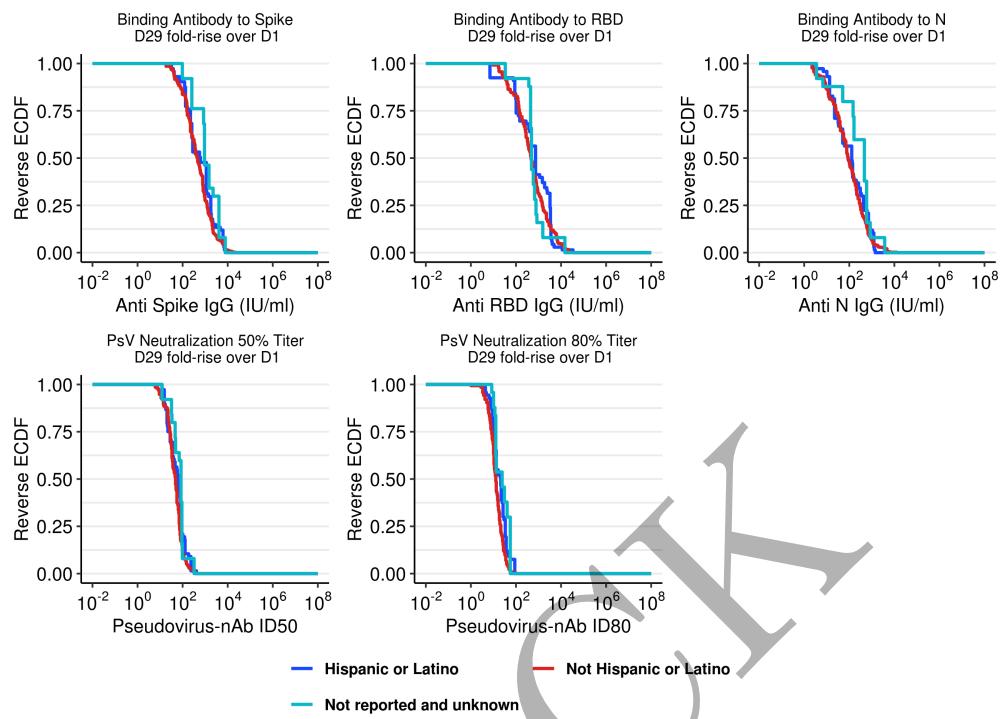


Figure 2.127: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT599

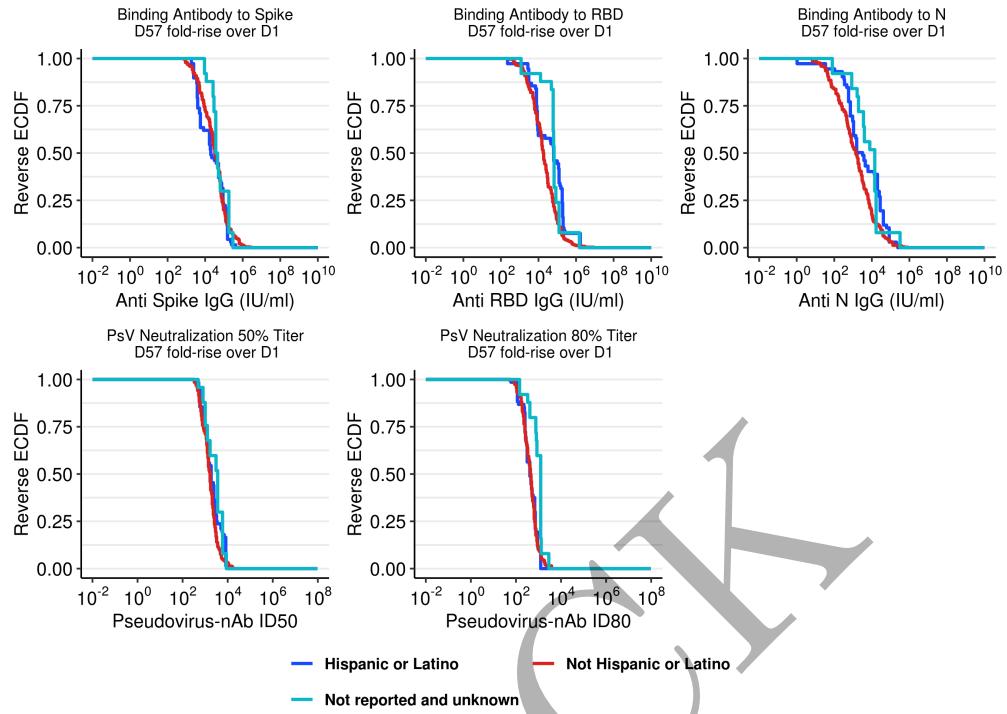


Figure 2.128: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

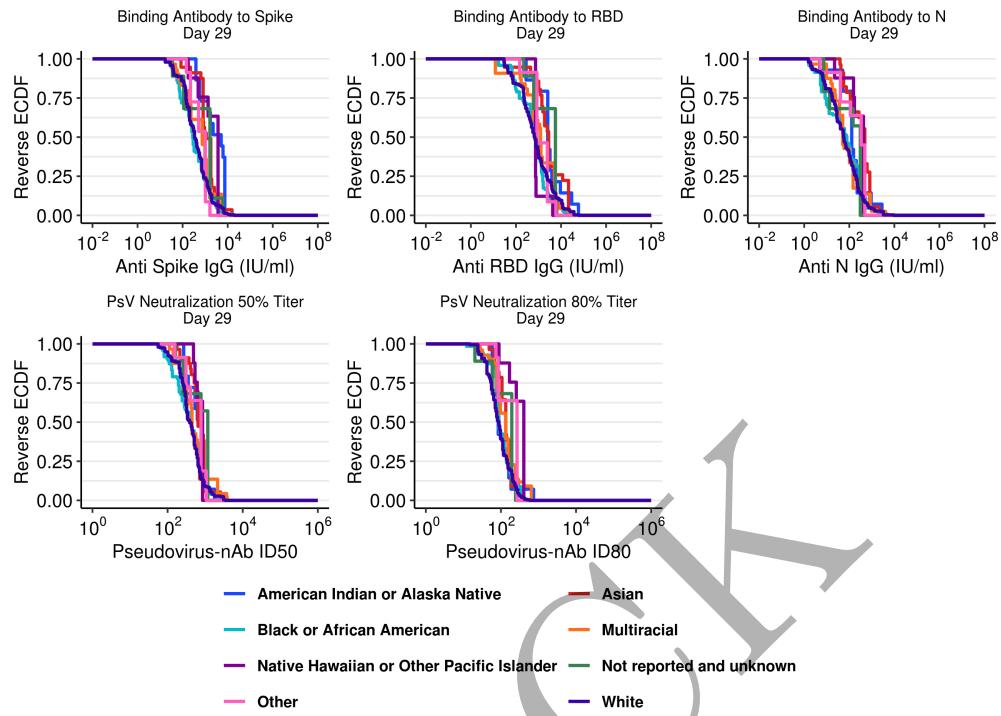


Figure 2.129: RCDF plots for D29 Ab markers: baseline positive vaccine arm by race.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT601

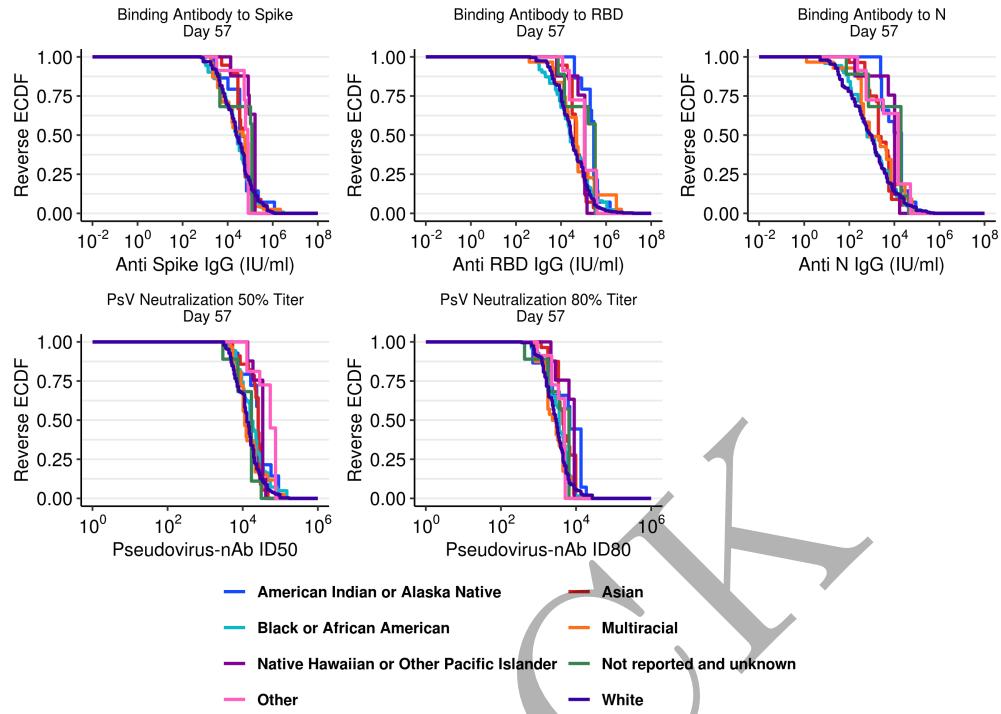


Figure 2.130: RCDF plots for D57 Ab markers: baseline positive vaccine arm by race.

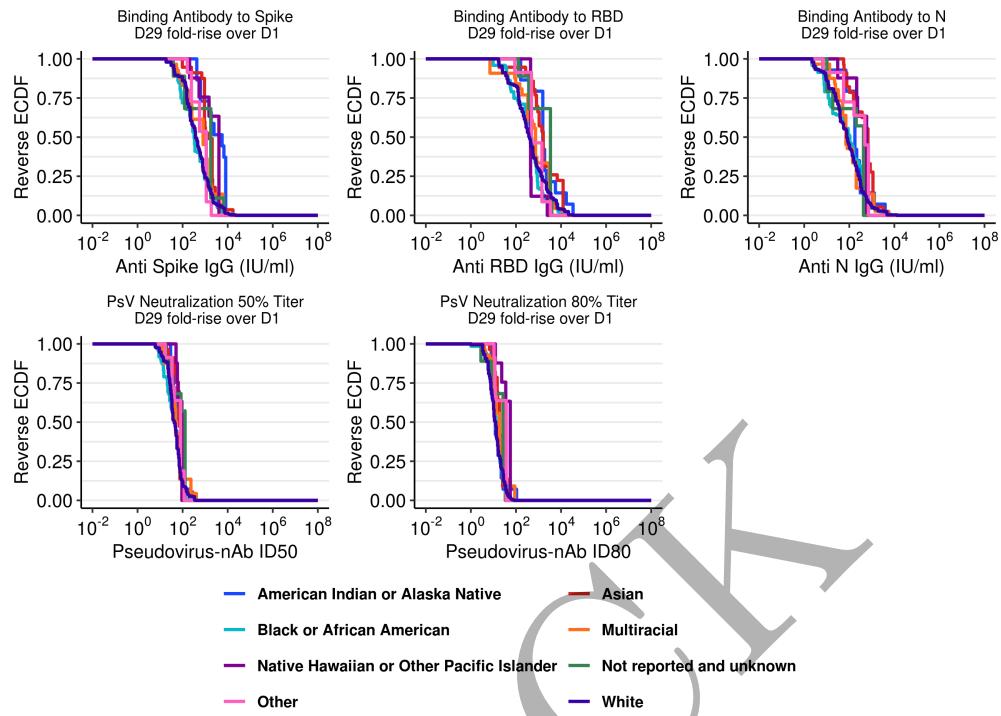


Figure 2.131: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT603

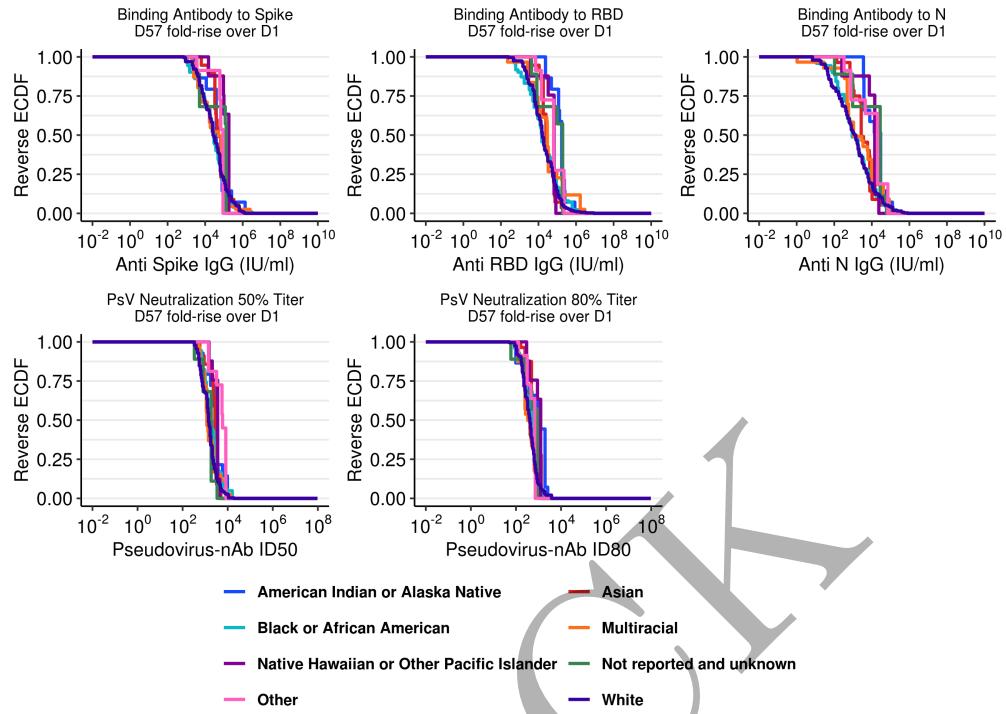


Figure 2.132: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

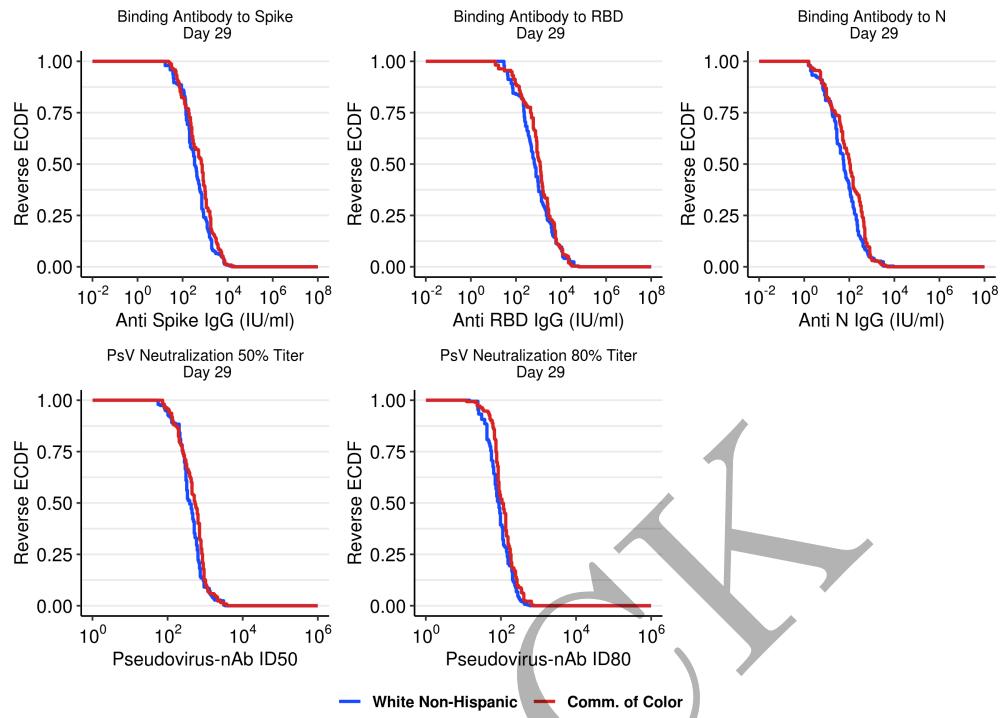


Figure 2.133: RCDF plots for D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT605

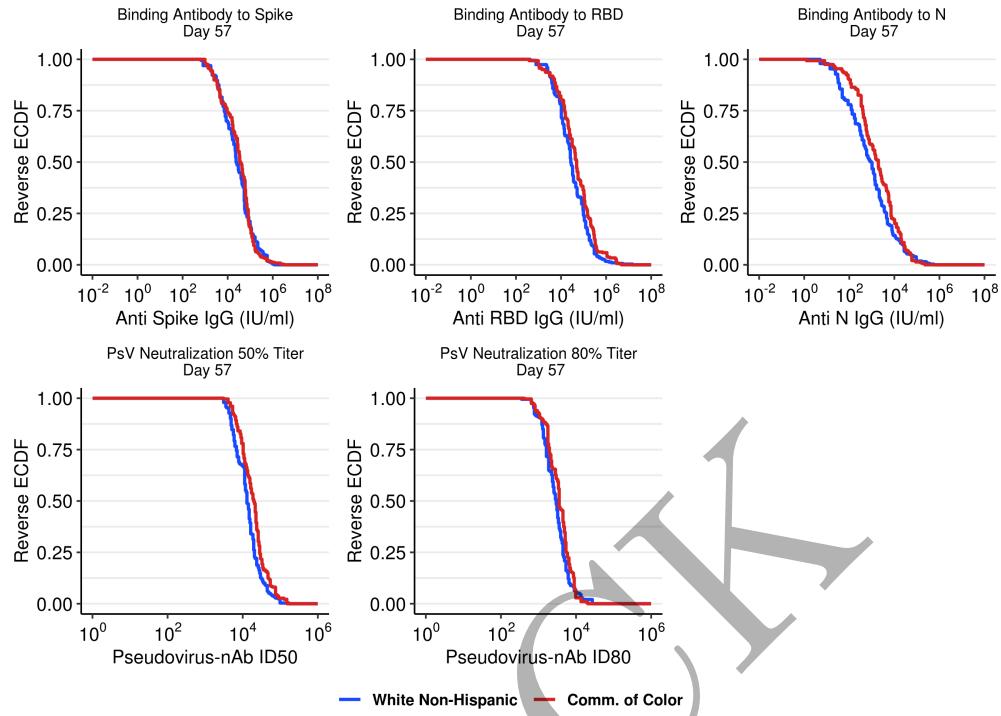


Figure 2.134: RCDF plots for D57 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

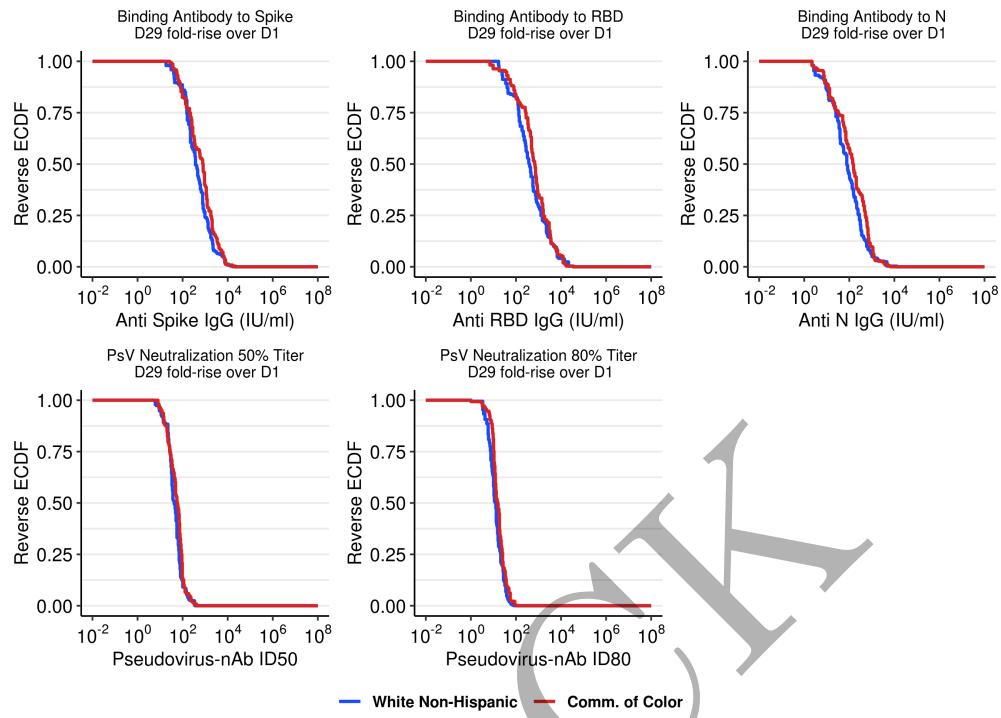


Figure 2.135: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT607

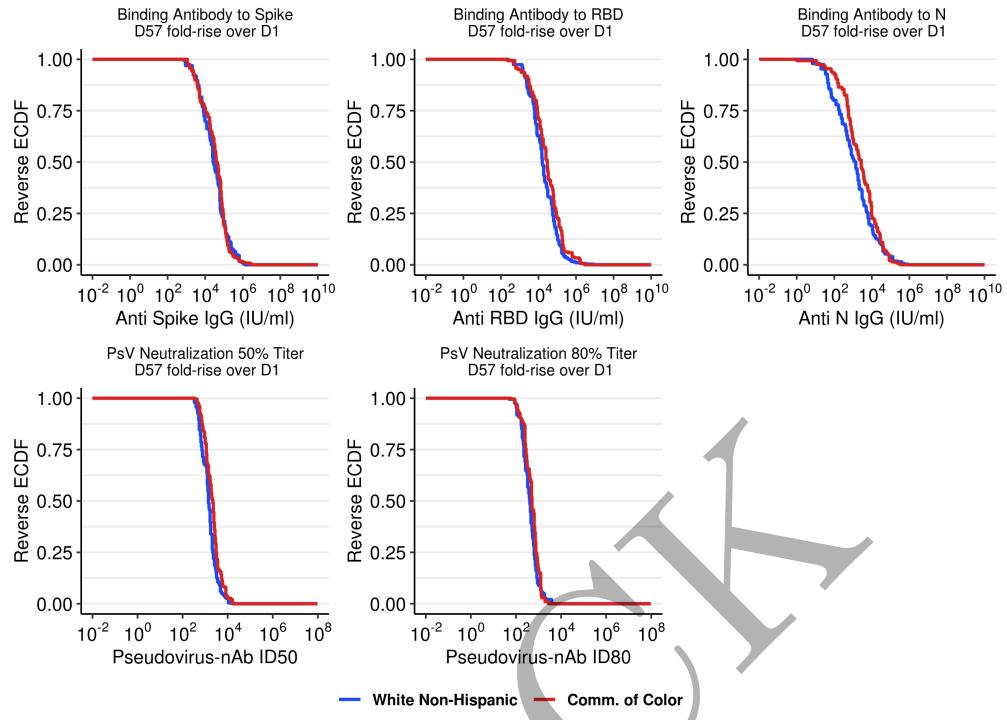


Figure 2.136: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

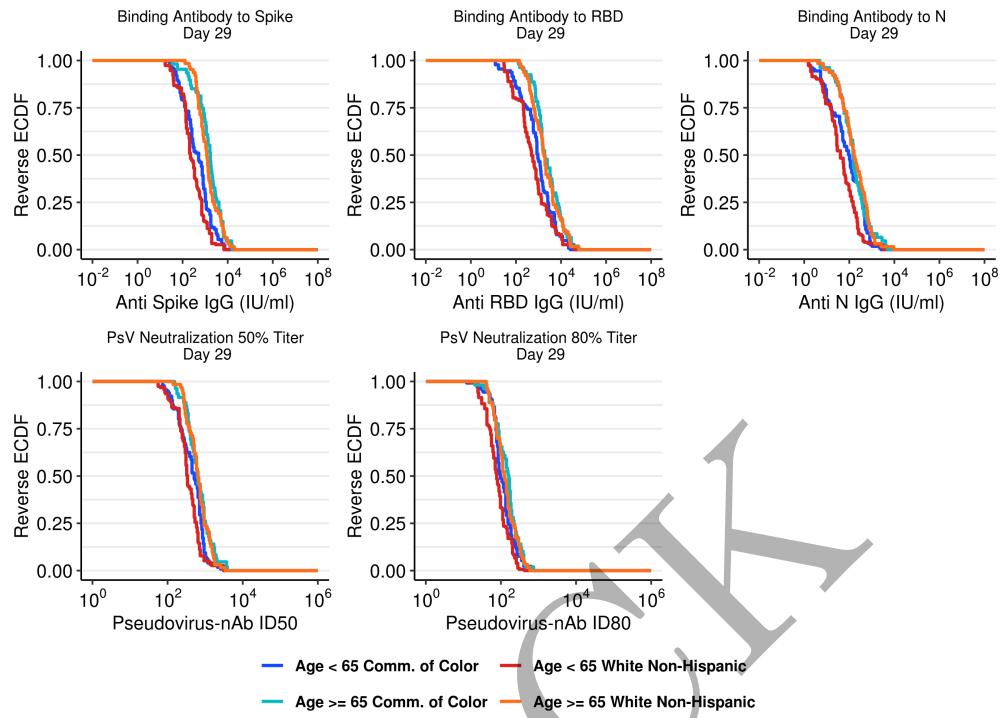


Figure 2.137: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT609

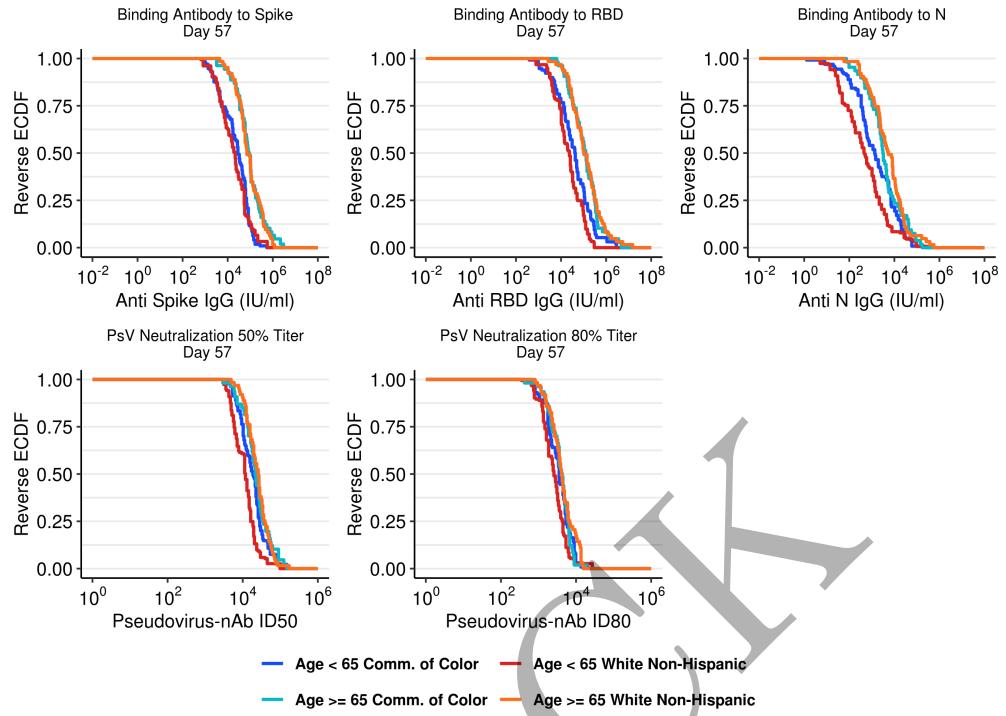


Figure 2.138: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

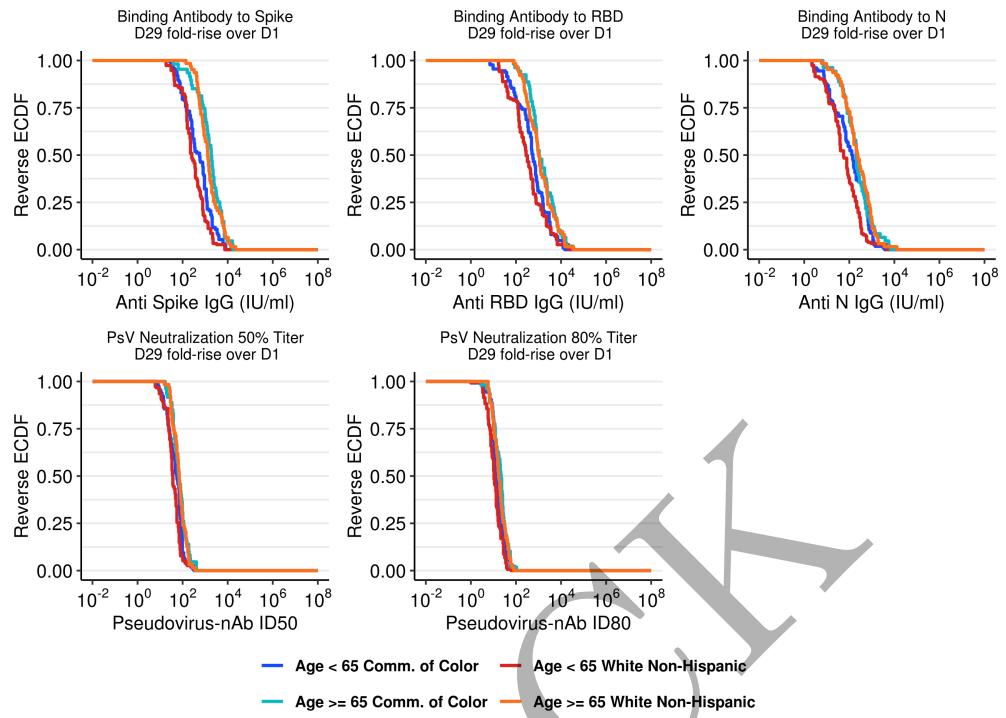


Figure 2.139: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT611

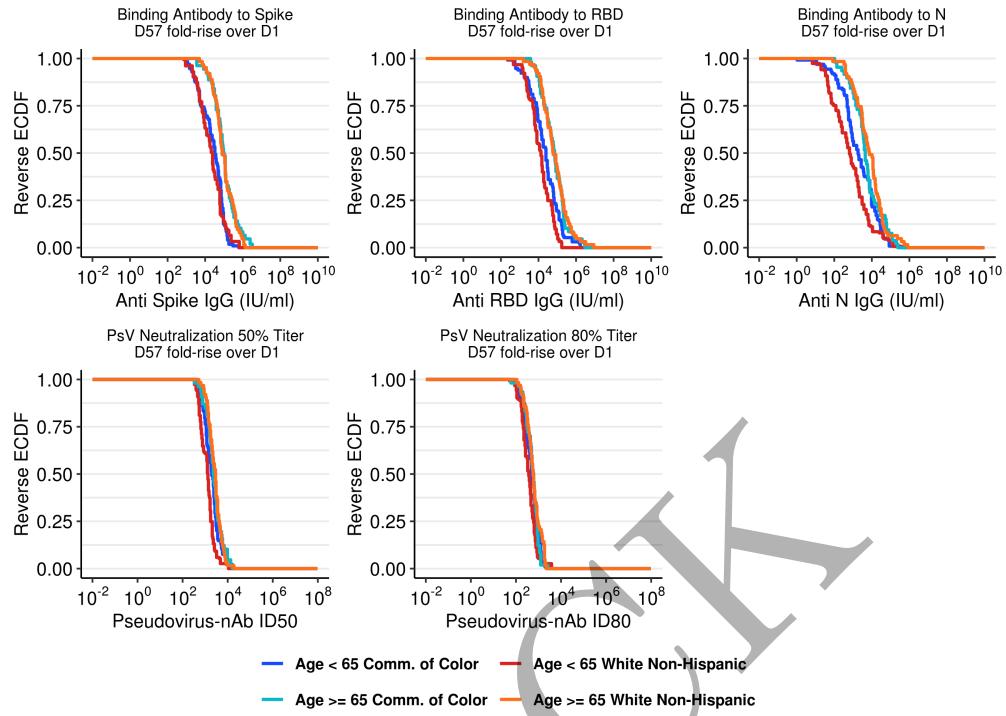


Figure 2.140: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

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

2.7.1 Baseline SARS-CoV-2 negative

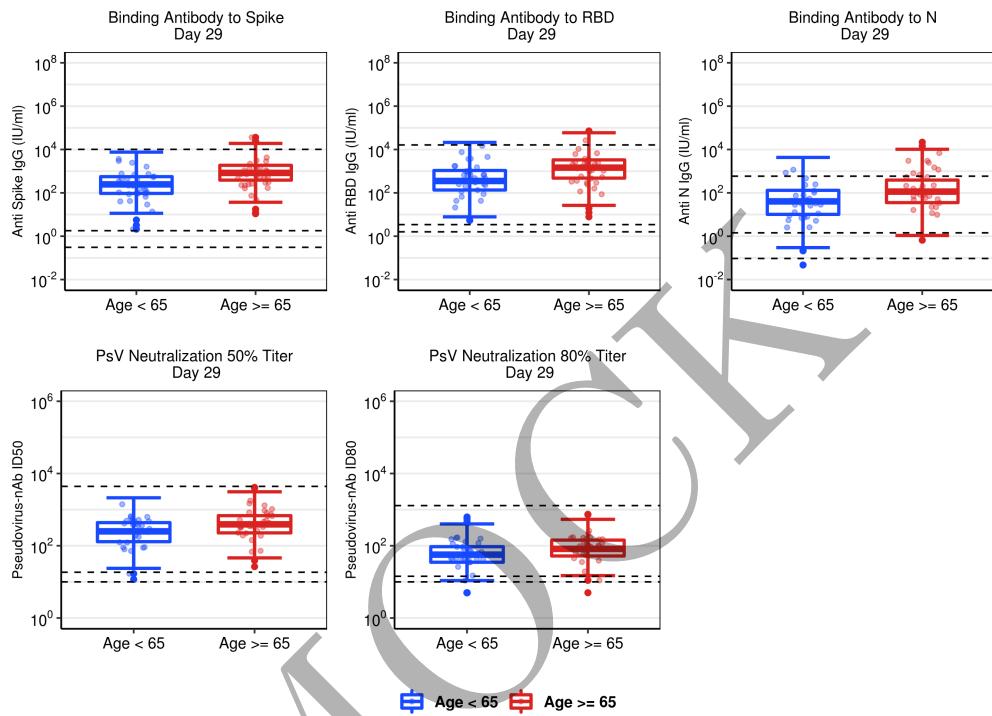


Figure 2.141: Boxplots of D29 Ab markers: Baseline negative vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and LLOD, from top to bottom respectively.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT613

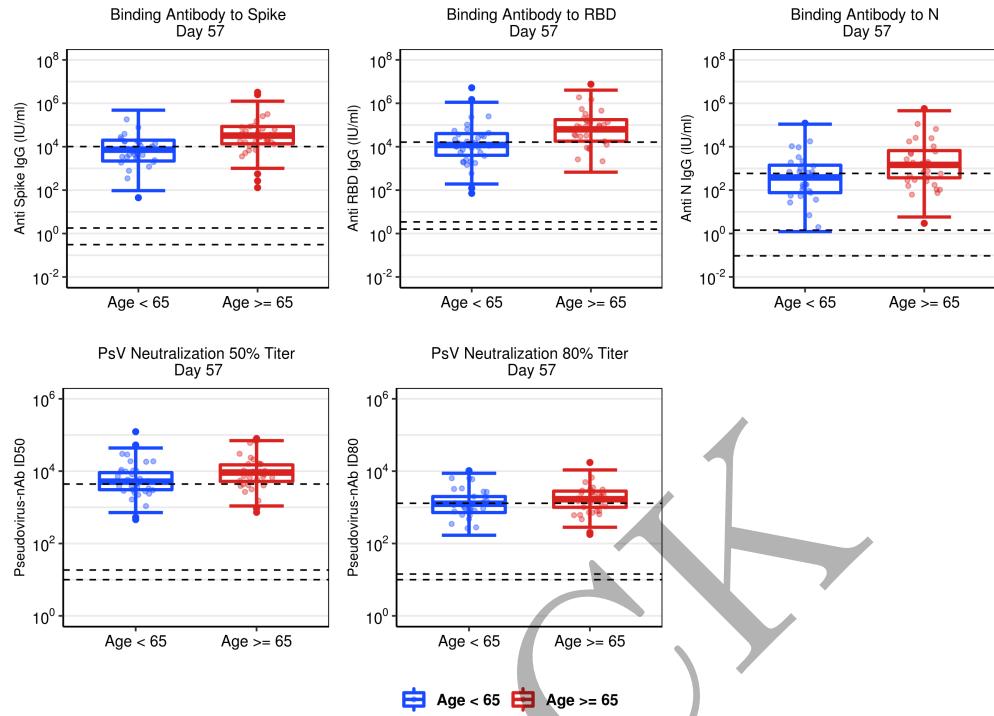


Figure 2.142: Boxplots of D57 Ab markers: Baseline negative vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and LLD, from top to bottom respectively.

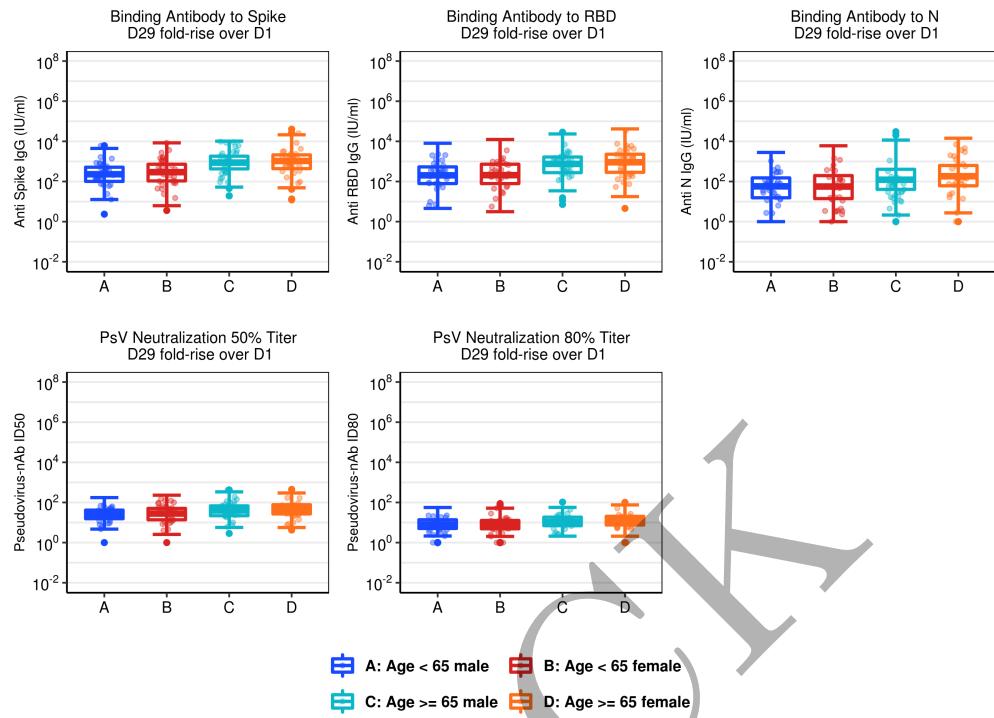


Figure 2.143: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT615

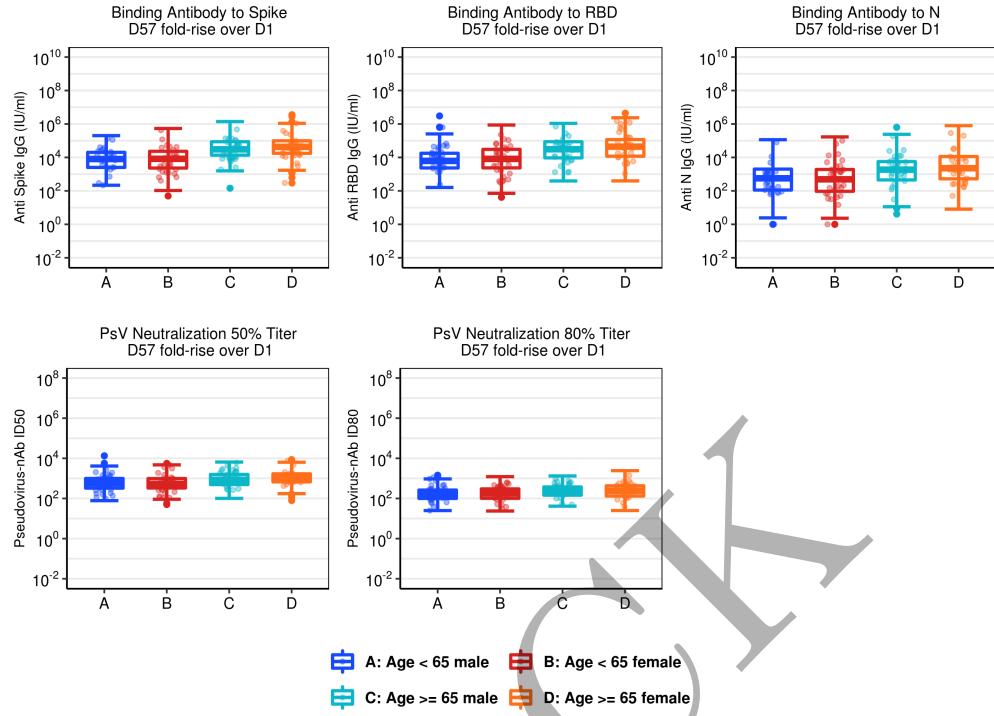


Figure 2.144: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

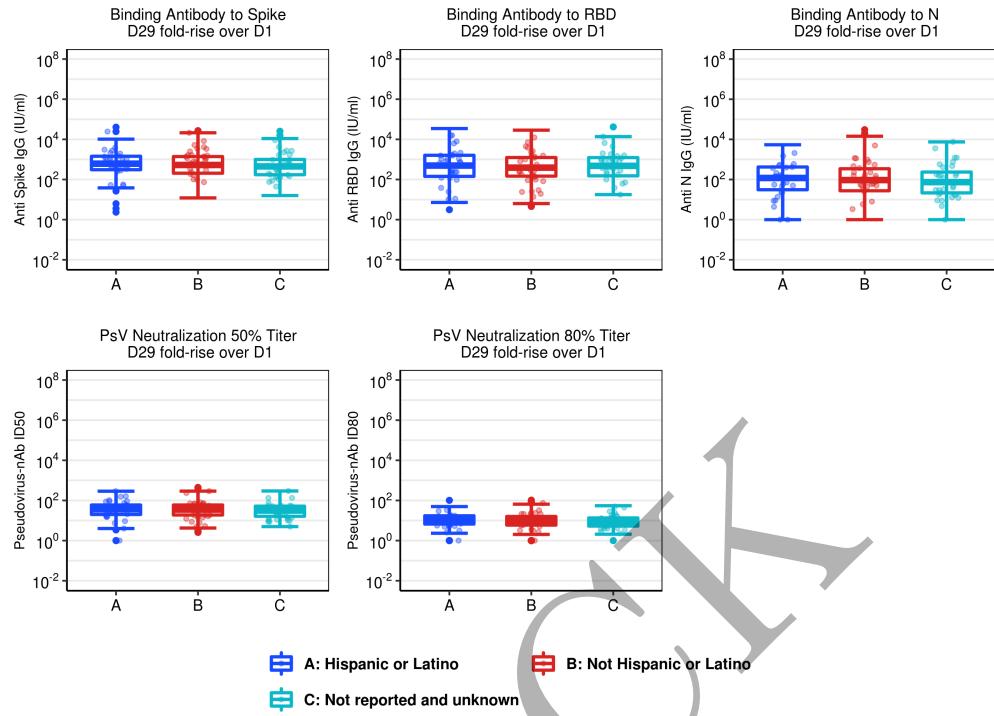


Figure 2.145: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT617

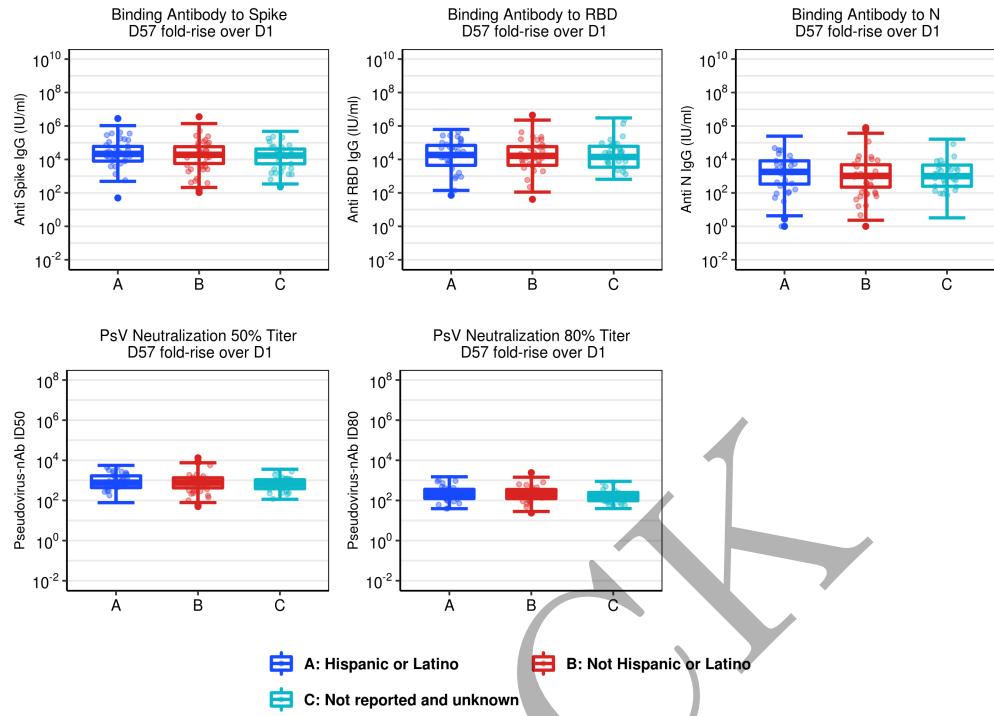


Figure 2.146: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.

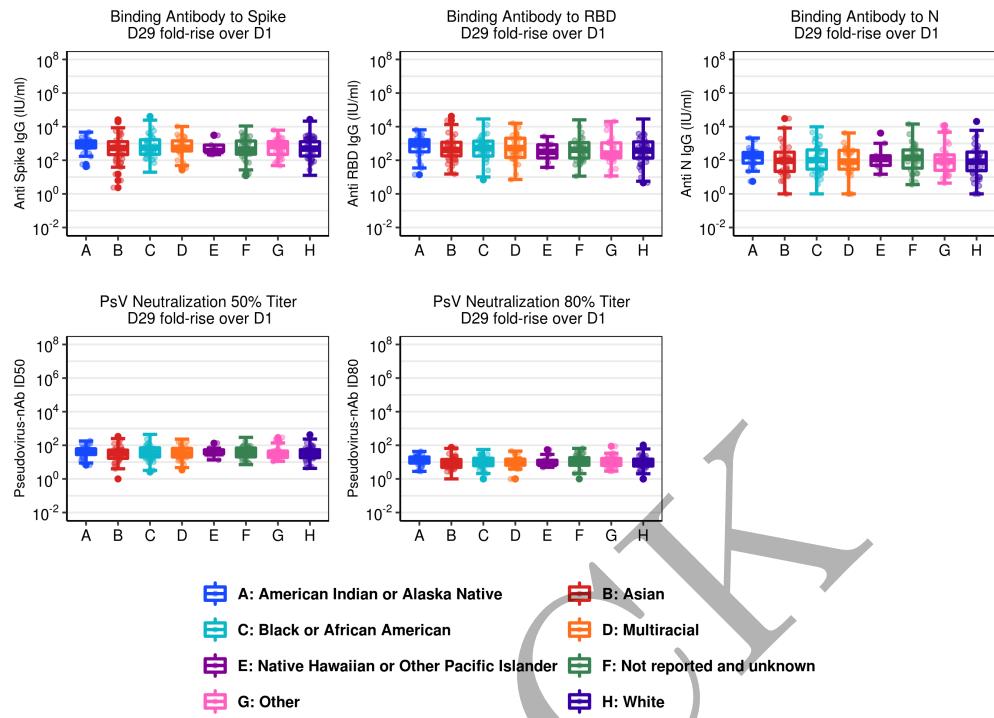


Figure 2.147: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT619

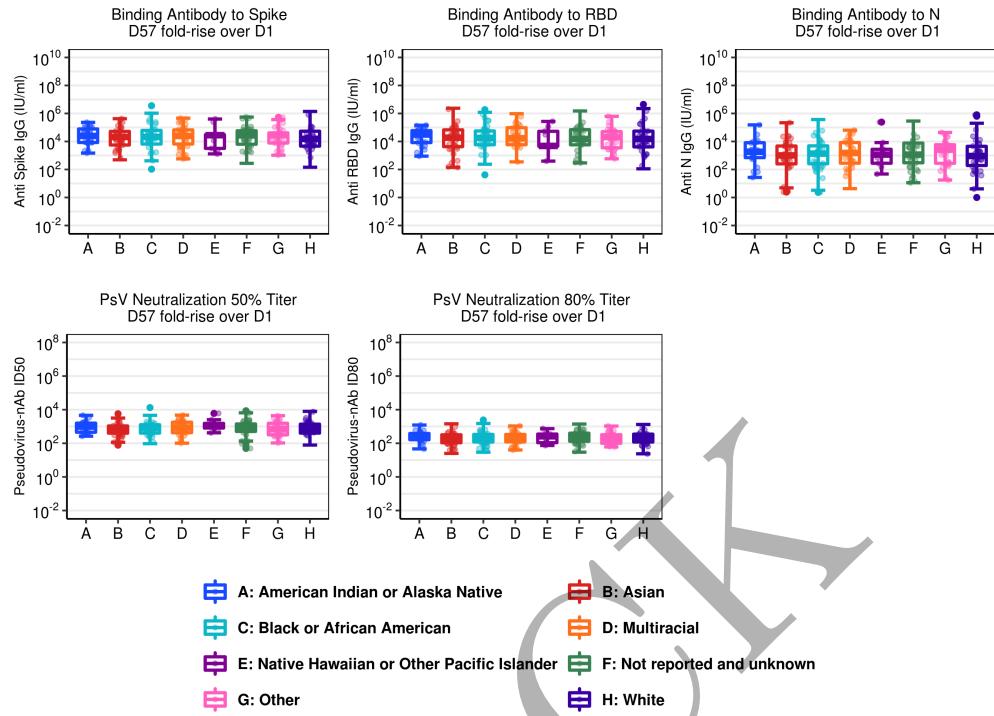


Figure 2.148: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

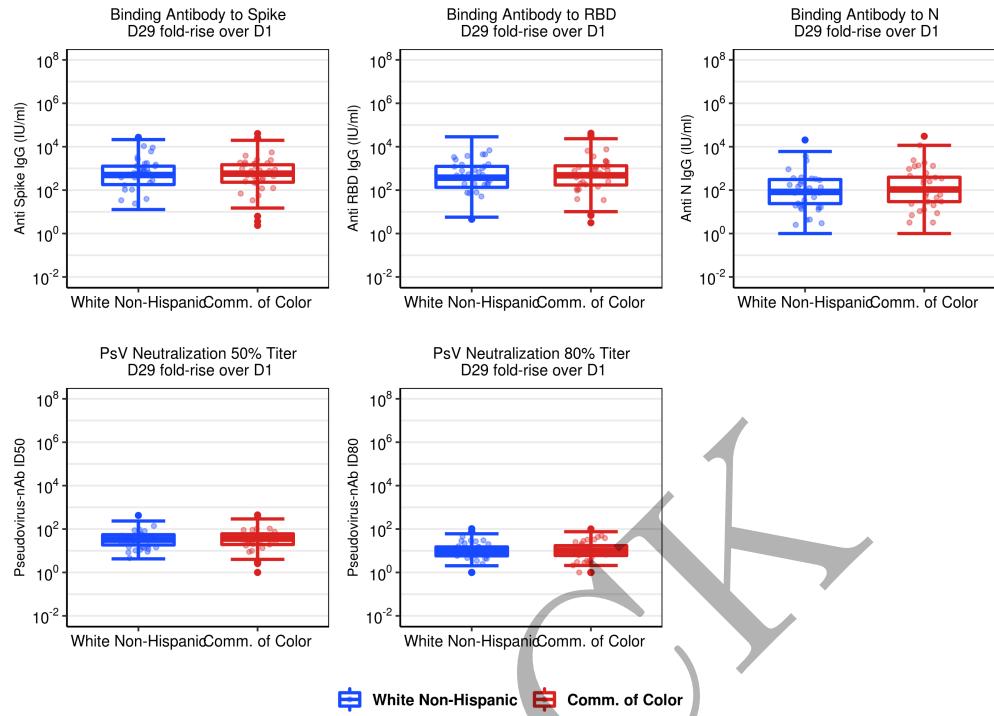


Figure 2.149: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT621

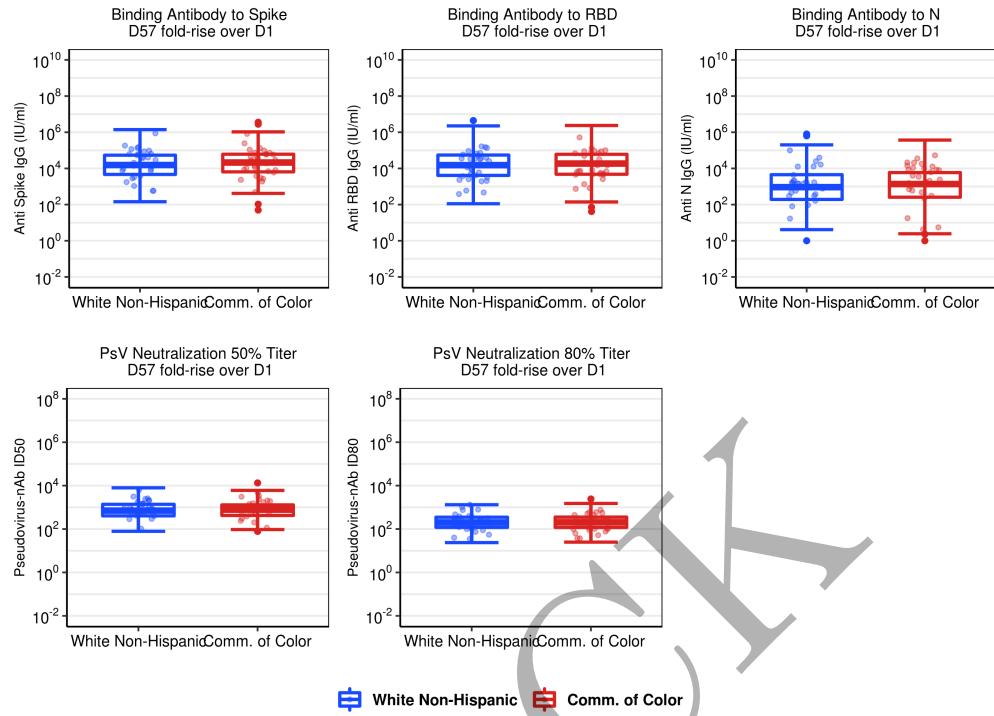


Figure 2.150: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.

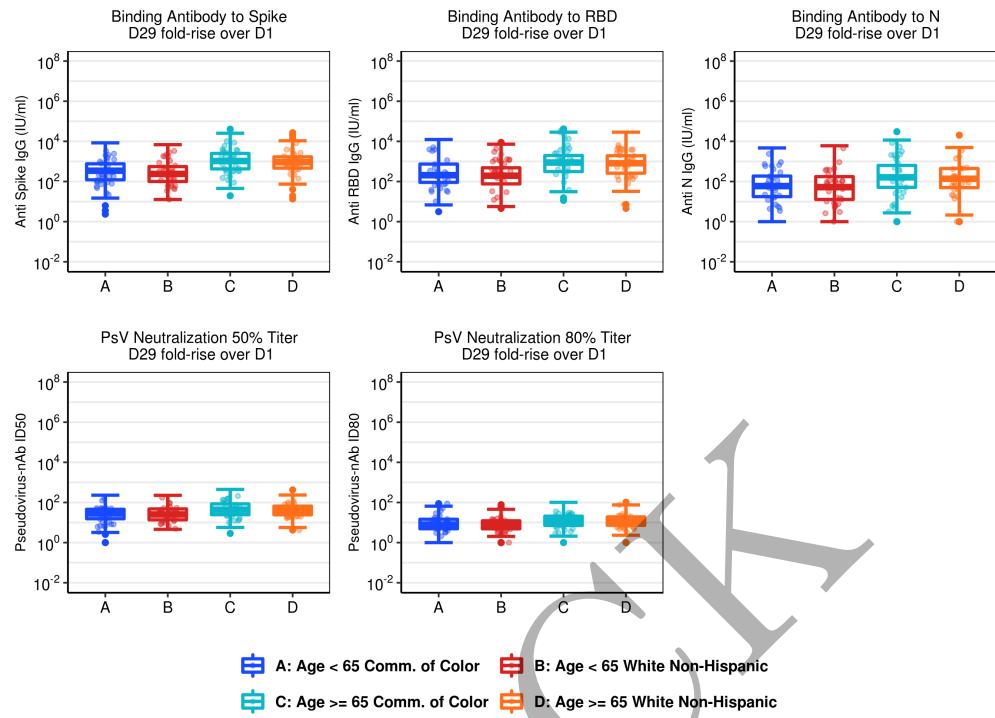


Figure 2.151: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT623

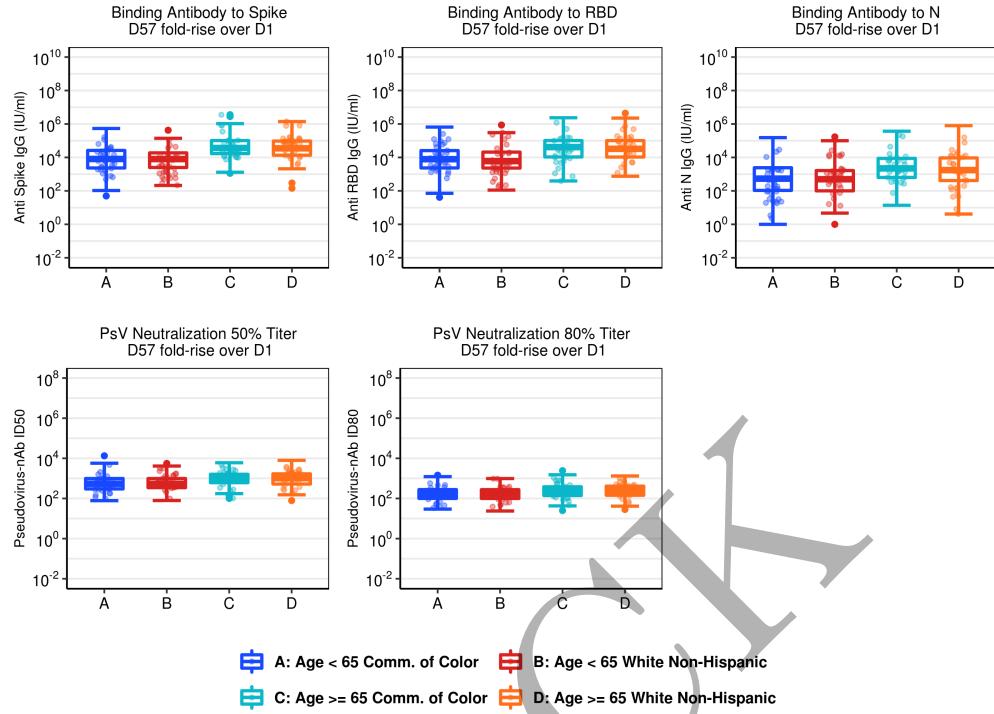


Figure 2.152: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

2.7.2 Baseline SARS-CoV-2 positive

MOCK

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT625

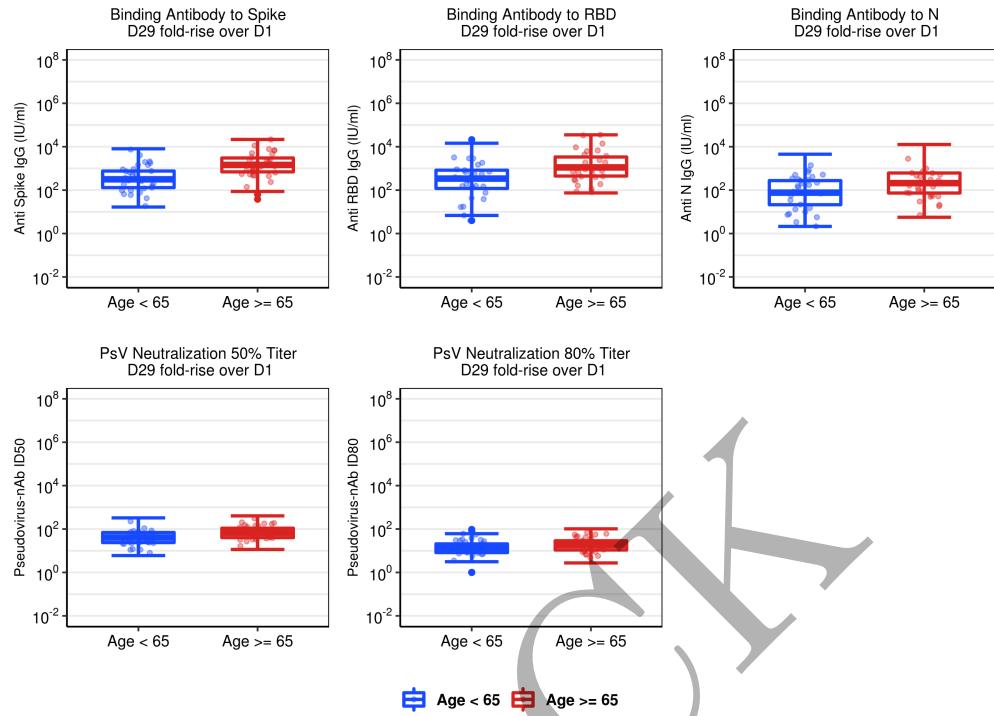


Figure 2.153: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

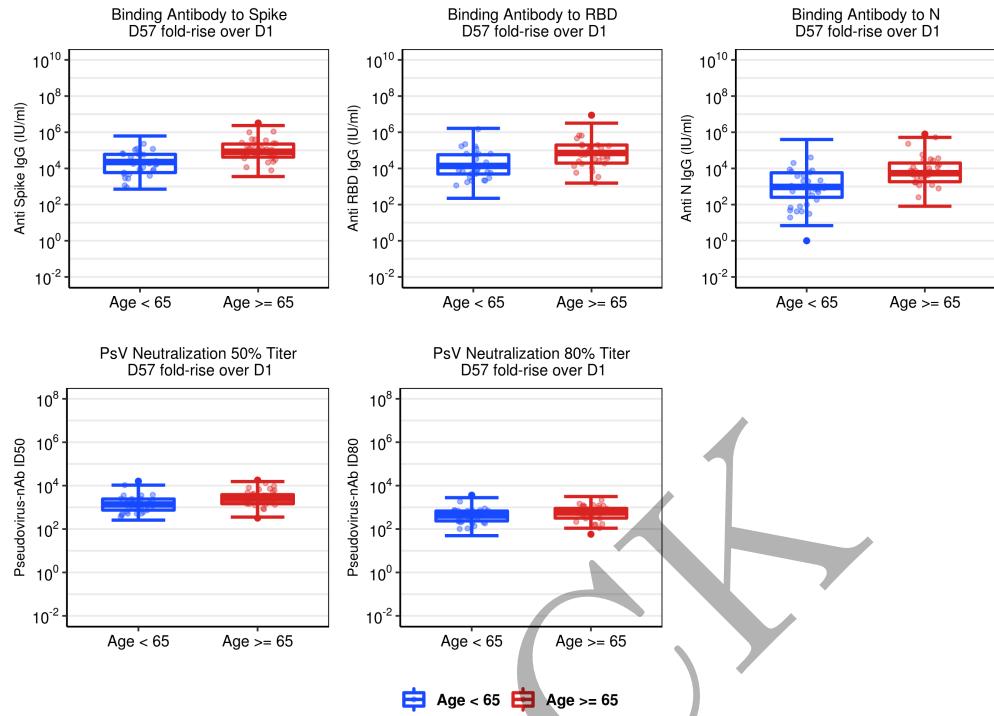


Figure 2.154: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT627

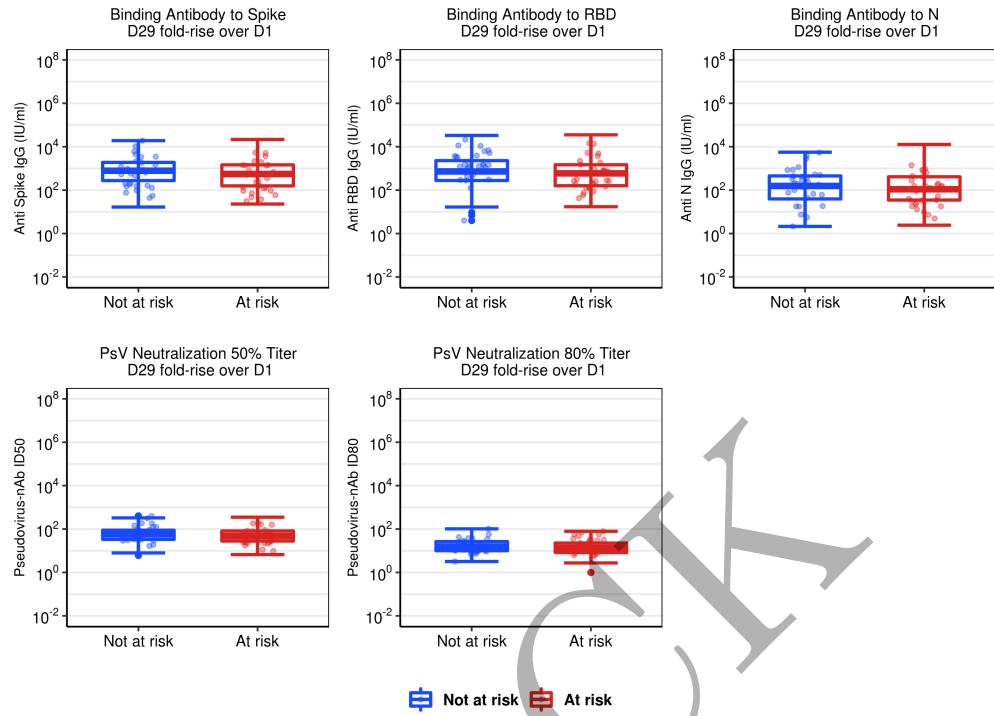


Figure 2.155: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

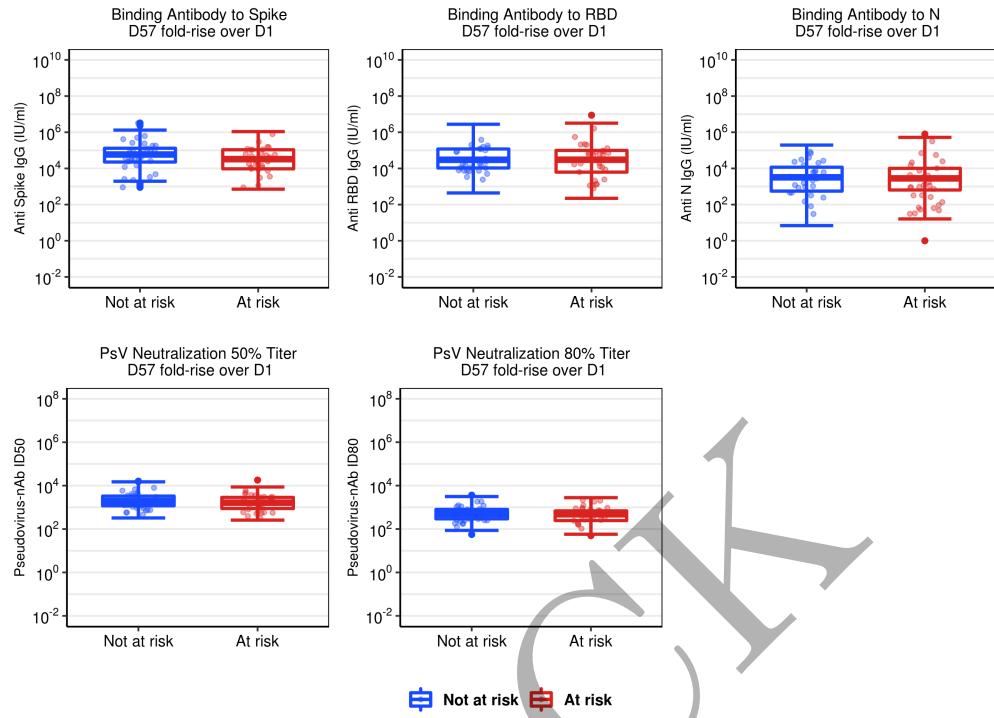


Figure 2.156: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT629

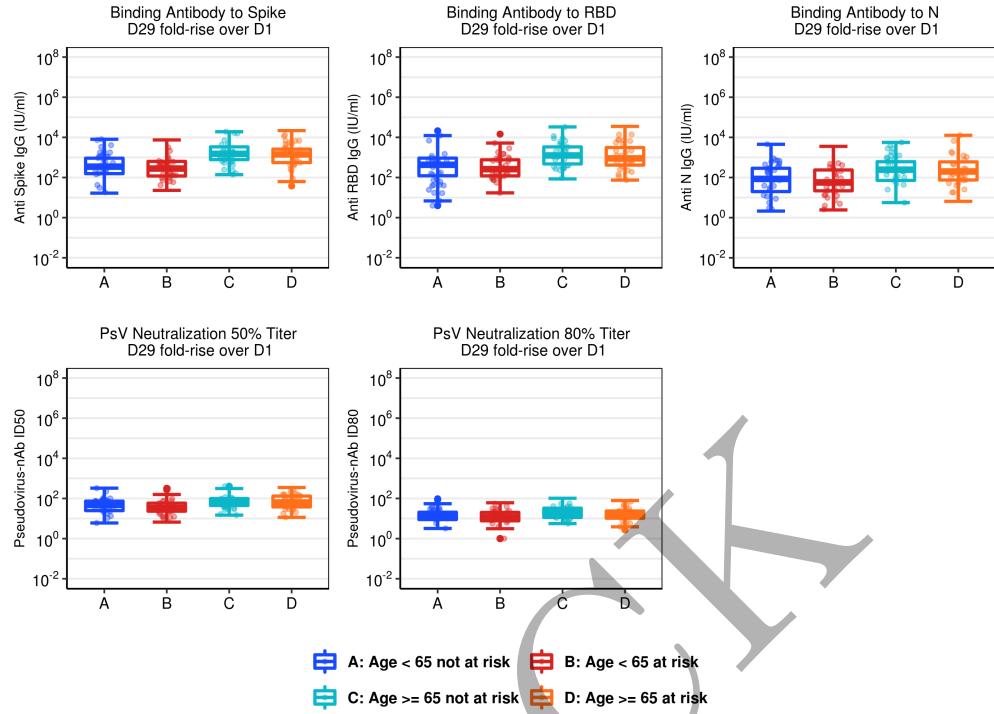


Figure 2.157: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

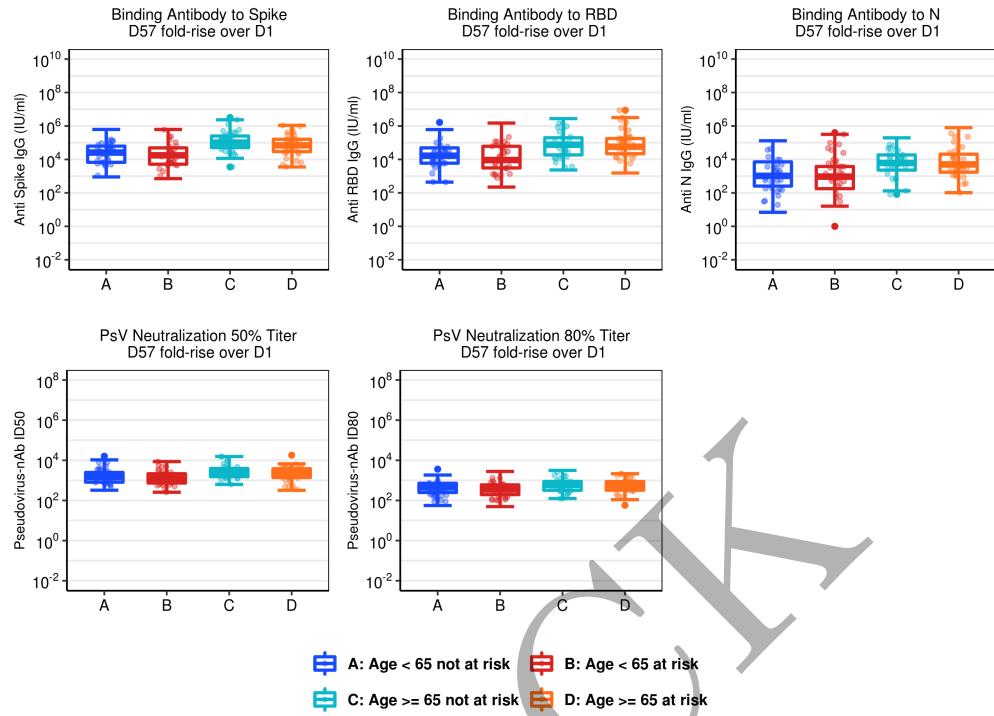


Figure 2.158: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT631

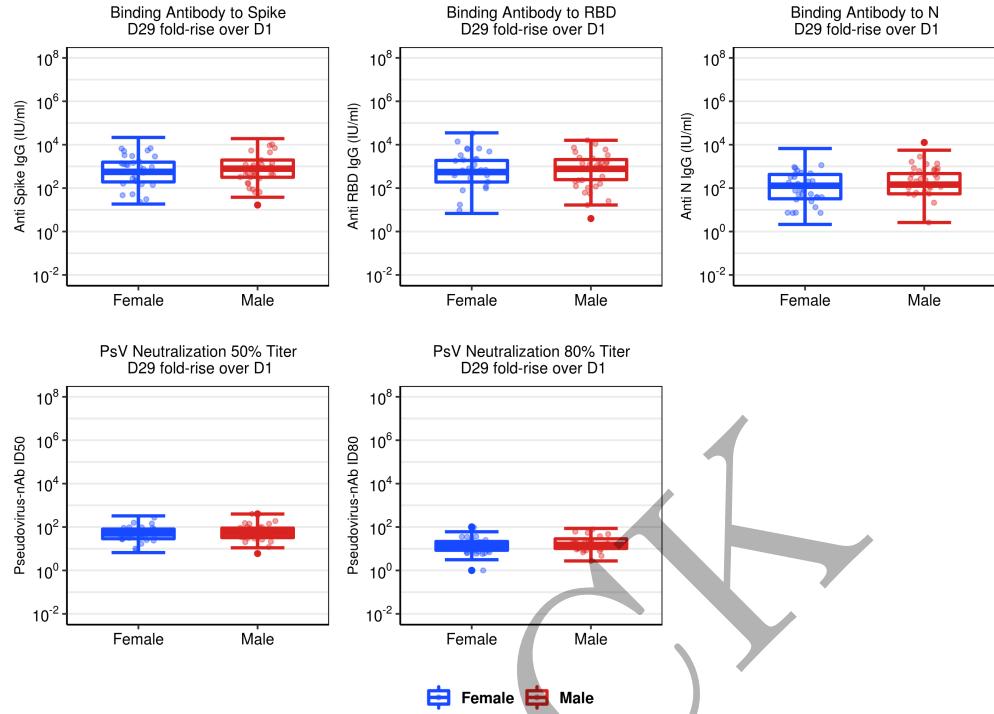


Figure 2.159: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

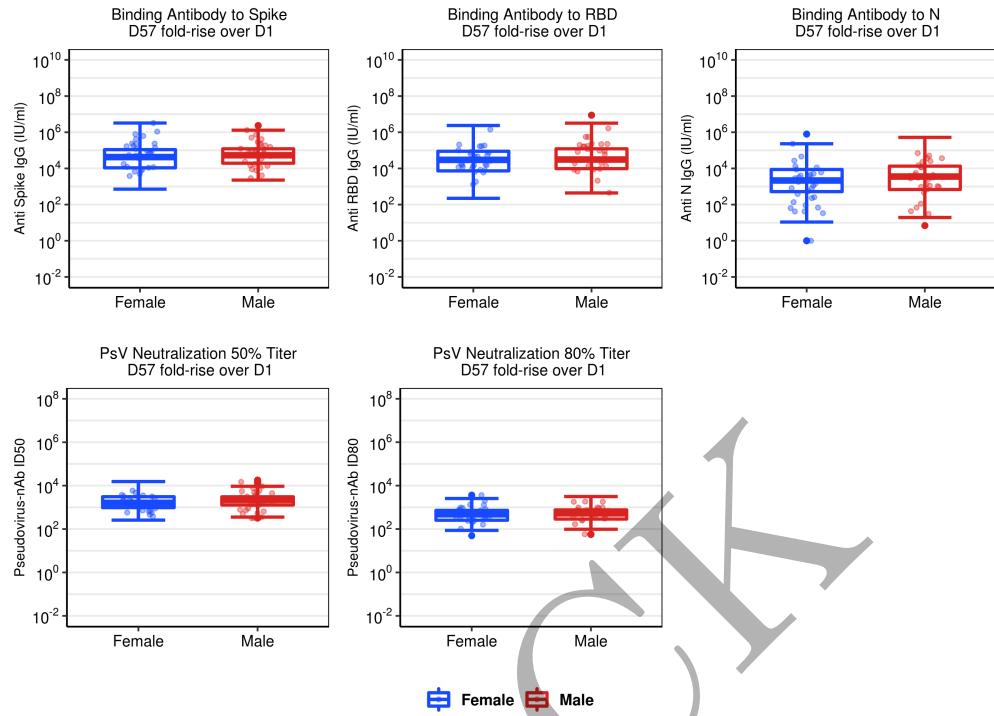


Figure 2.160: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT633

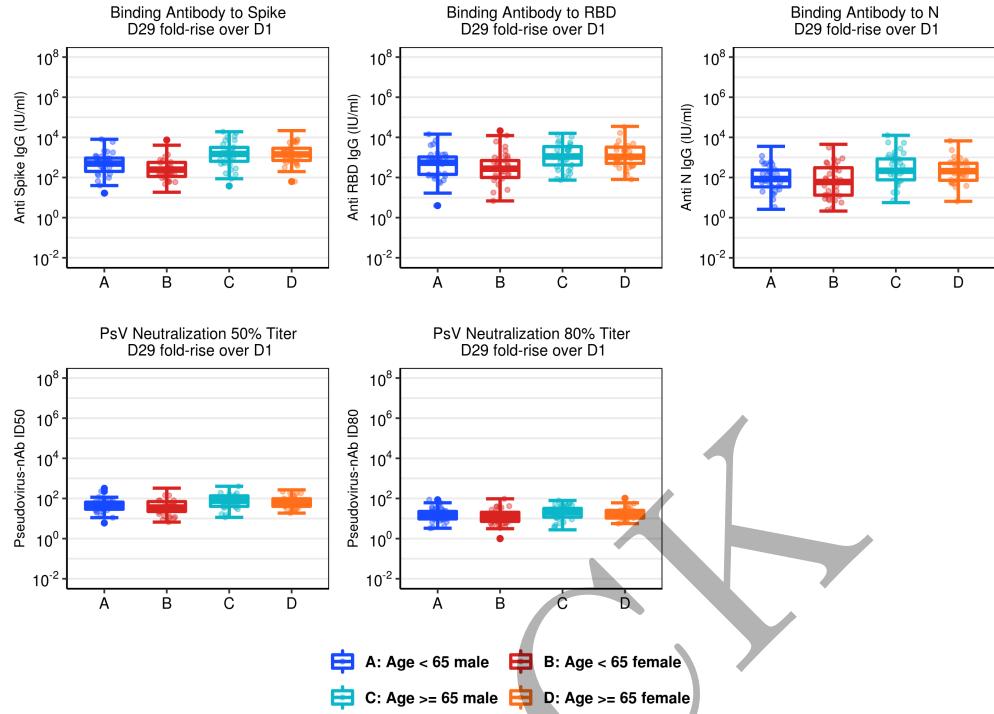


Figure 2.161: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

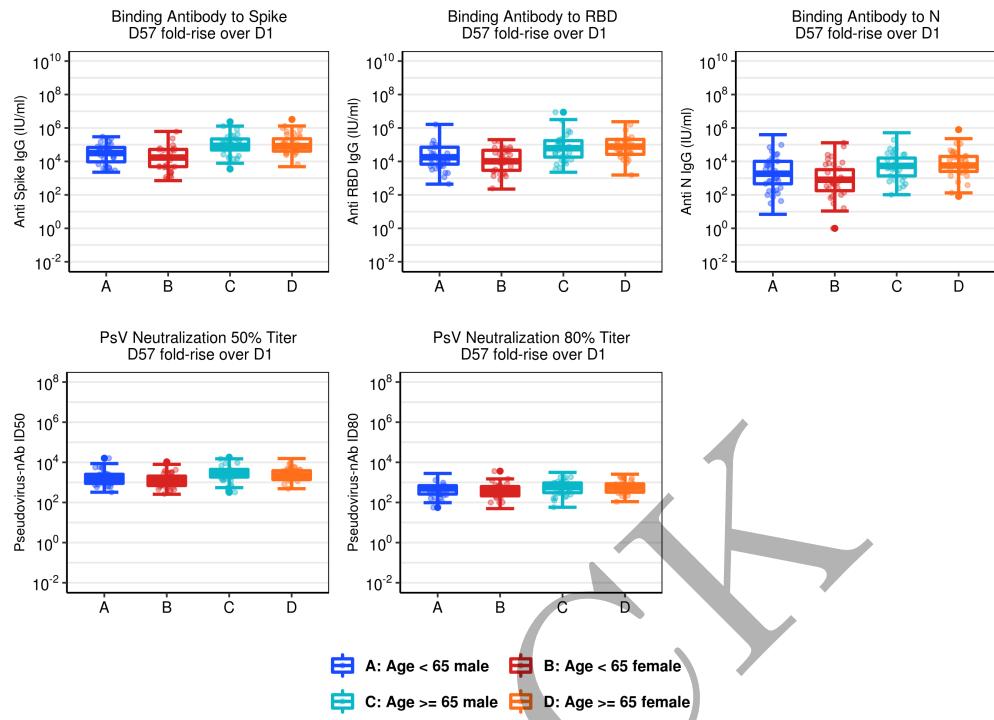


Figure 2.162: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT635

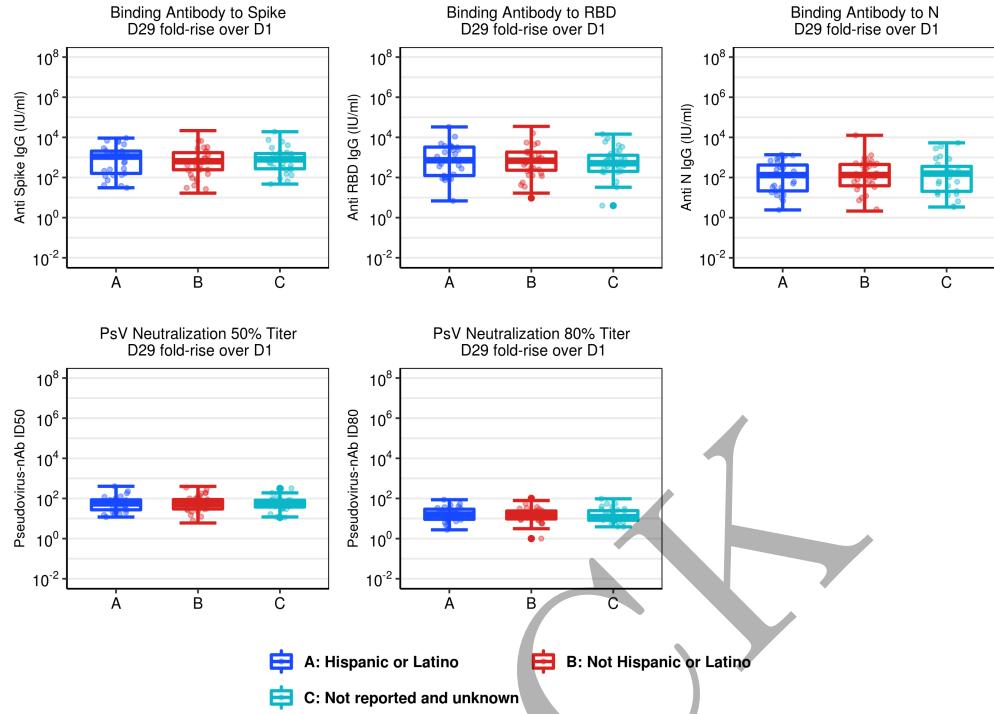


Figure 2.163: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

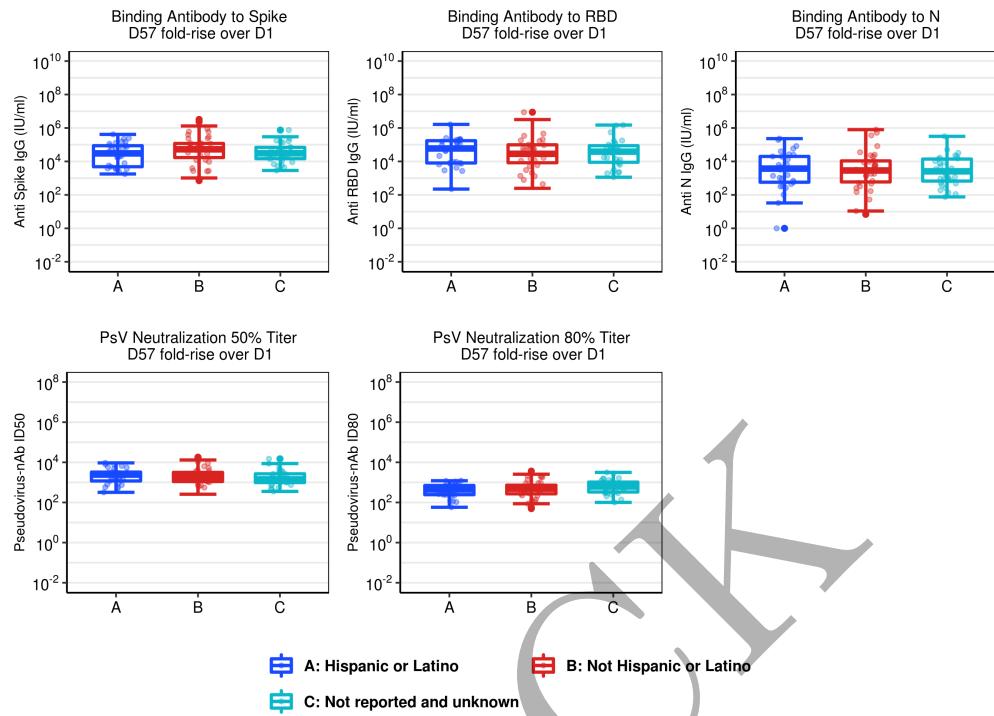


Figure 2.164: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT637

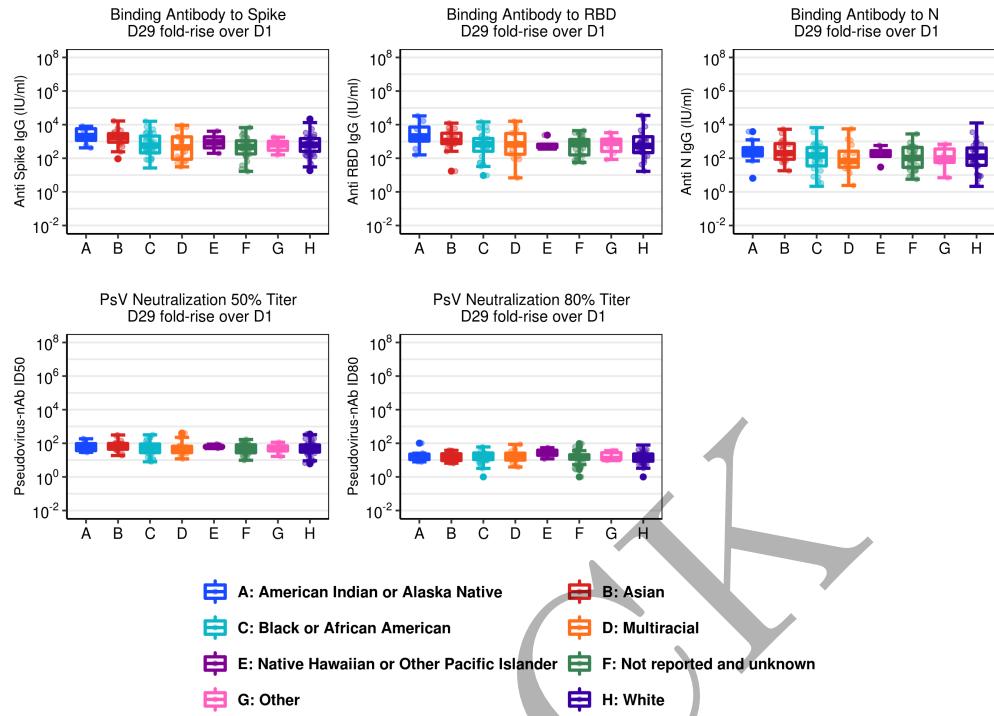


Figure 2.165: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

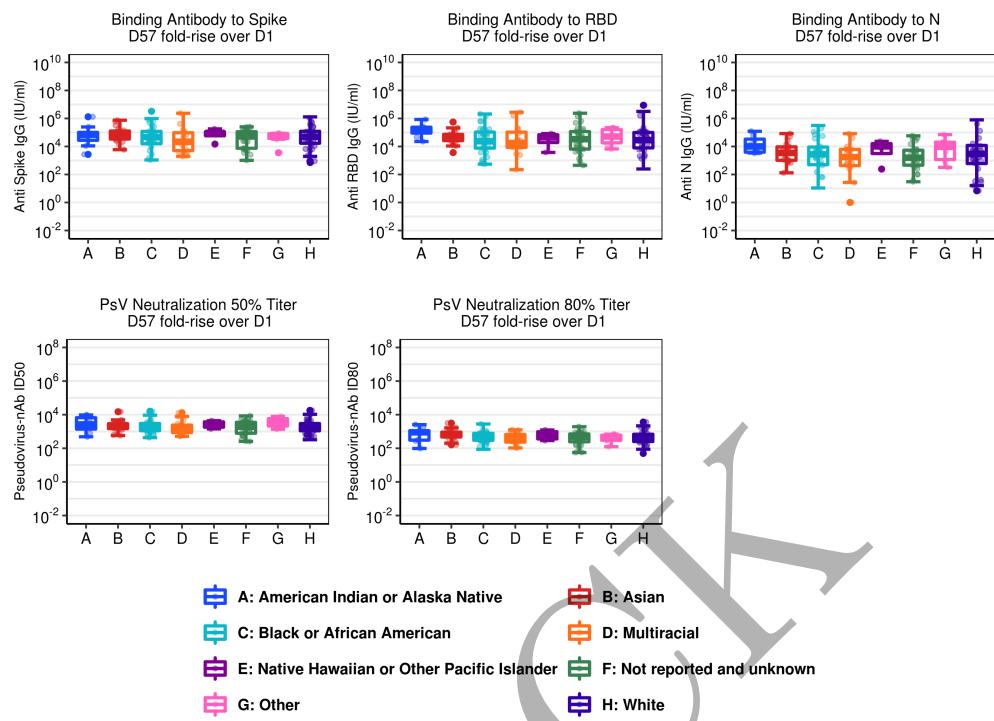


Figure 2.166: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT639

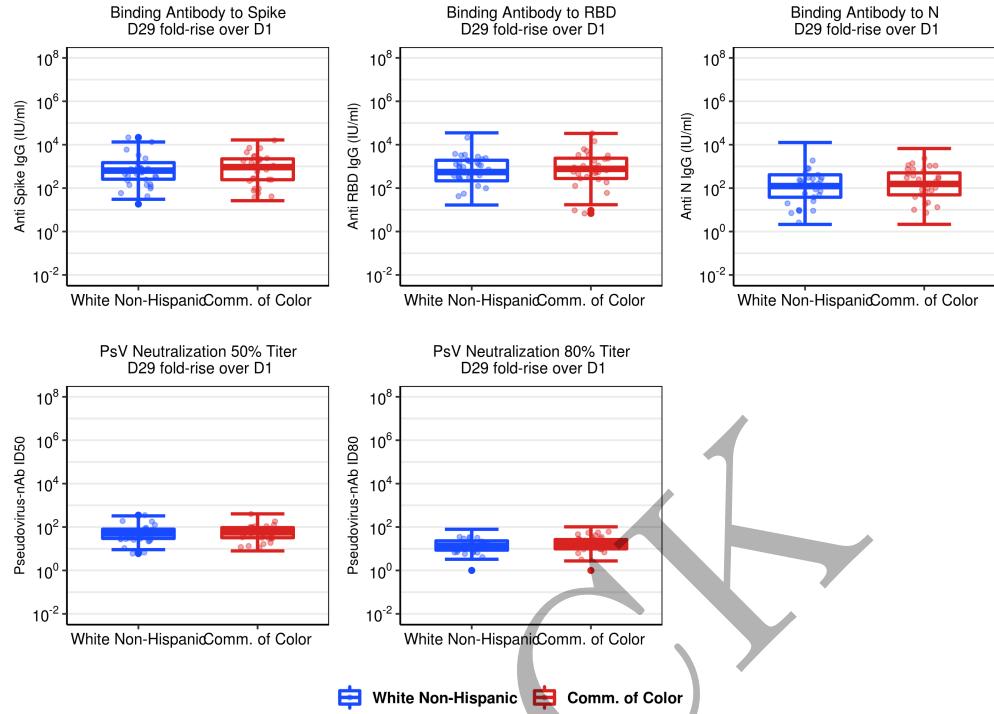


Figure 2.167: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

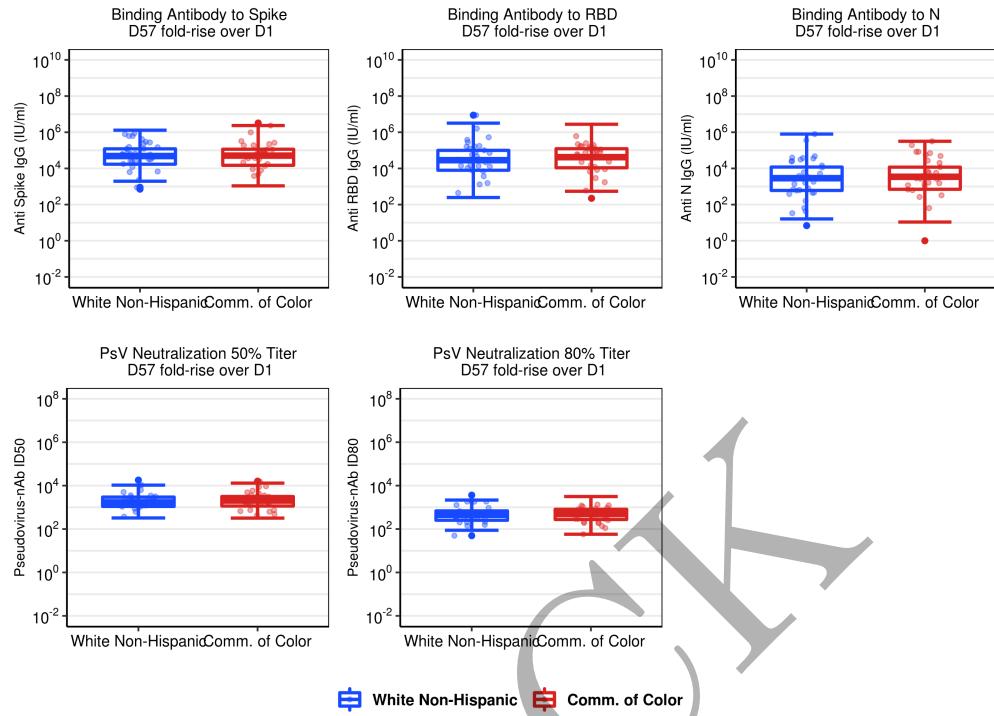


Figure 2.168: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT641

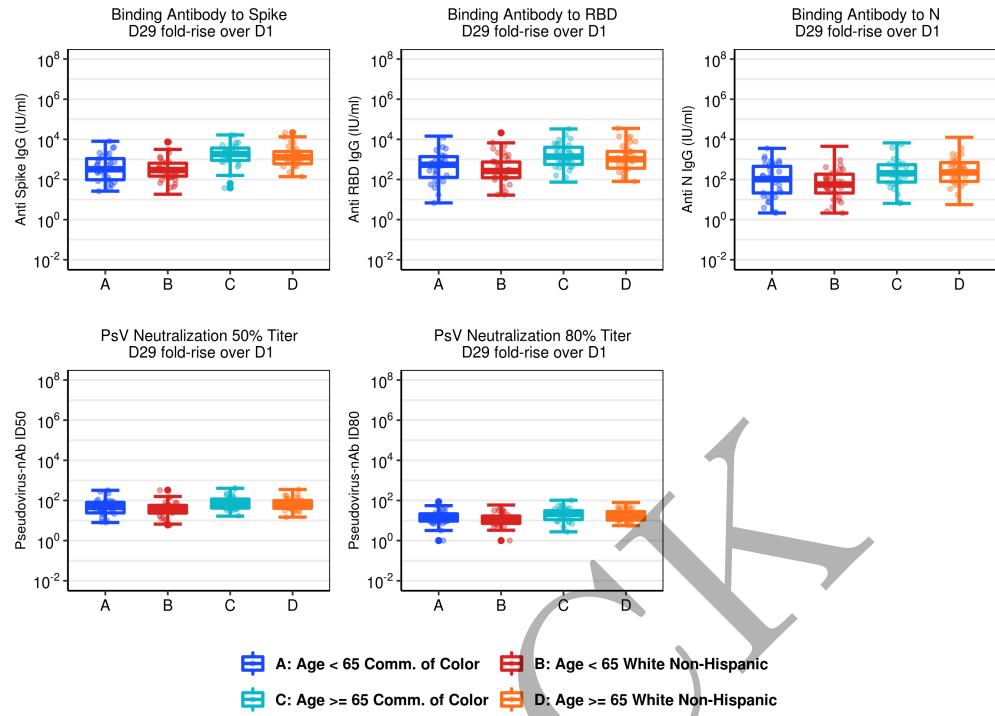


Figure 2.169: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

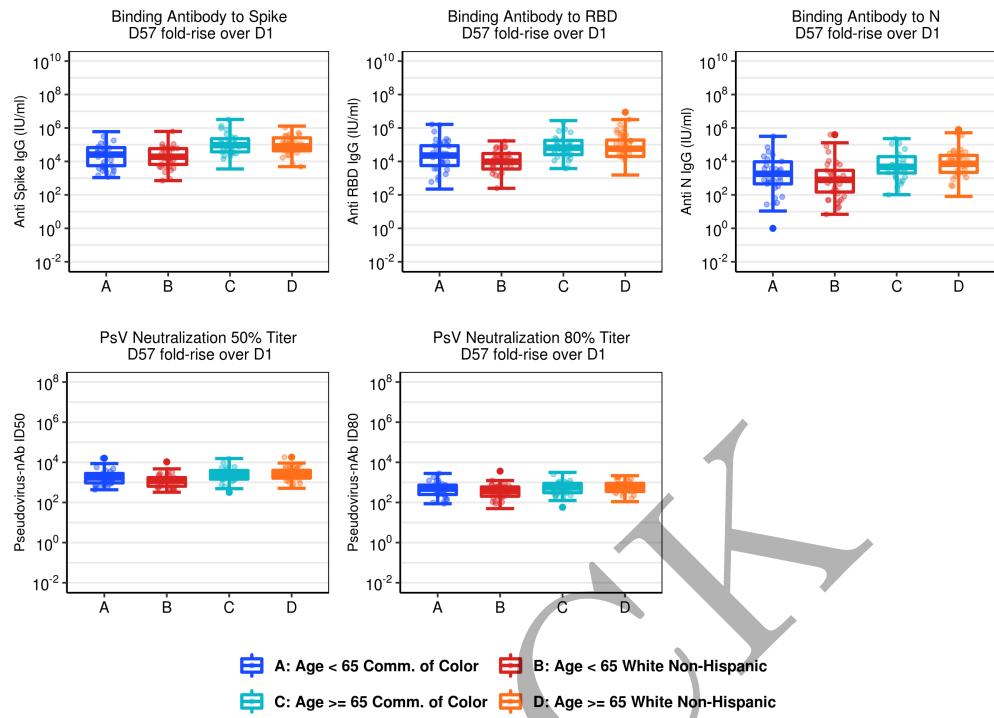


Figure 2.170: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

Chapter 3

Appendix

- This report was built from the [CoVPN/correlates_reporting](#) repository with commit hash 3d0cc4eb9546bad8053906095bc1b40b7a112ba8. A diff of the changes introduced by that commit may be viewed at https://github.com/CoVPN/correlates_reporting/commit/3d0cc4eb9546bad8053906095bc1b40b7a112ba8
- The sha256 hash sum of the raw input file, “COVID_VEtiral_practicedata_primarystage1.csv”: 45ff85033ffbc717462d678b41bc4060a12c7bc60952e2cb72297bb5500b97b9
- The sha256 hash sum of the processed file, “practice_data.csv”: 8de0bf2f66901eb123908b42ec8dd87cf9304412ca180aff8a