

COVID-19 Immunogenicity Analysis Report
MockCOVE Study

USG COVID-19 Response Biostatistics Team

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Contents

| | | |
|----------|---|------------|
| 1 | Disclaimers | 21 |
| 2 | Tabular Description of Immunogenicity Data | 23 |
| 2.1 | Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Negative Per-Protocol Cohort | 23 |
| 2.2 | Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Positive Per-Protocol Cohort | 25 |
| 2.3 | Sample Sizes of Random Subcohort Strata for Measuring Antibody Markers | 26 |
| 2.4 | Percentage of responders, and participants with concentrations $\geq 2\times$ LLOQ or $\geq 4\times$ LLOQ for binding antibody markers | 27 |
| 2.5 | Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers | 98 |
| 2.6 | Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers | 169 |
| 2.7 | Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) | 197 |
| 2.8 | Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination | 325 |
| 2.9 | The ratios of GMTs/GMCs between groups | 421 |
| 2.10 | Differences in the responder rates, 2FRs, 4FRs between the groups | 458 |
| 2.11 | Antibody levels in the baseline SARS-CoV-2 negative per-protocol cohort (vaccine vs. placebo) | 487 |
| 2.12 | Antibody levels in the baseline SARS-CoV-2 positive per-protocol cohort (vaccine vs. placebo) | 489 |
| 2.13 | Antibody levels in the per-protocol cohort (vaccine recipients) | 491 |
| 2.14 | Antibody levels in the per-protocol cohort (placebo recipients) | 493 |
| 3 | Graphical Description of Immunogenicity Data | 495 |
| 3.1 | Pairs plots of antibody markers for overall per-protocol cohort | 496 |
| 3.2 | RCDF plots of antibody markers for overall per-protocol cohort | 523 |
| 3.3 | Scatter plots of antibody markers versus age for overall per-protocol cohort | 539 |
| 3.4 | Box plots of antibody markers for overall per-protocol cohort | 551 |
| 3.5 | Spaghetti plots of antibody markers over time for the overall per-protocol cohort | 571 |
| 3.6 | RCDF plots of antibody markers by demographics for per-protocol cohort | 573 |
| 3.7 | Boxplots of antibody markers by demographics for per-protocol cohort | 681 |

List of Tables

| | | |
|------|---|-----|
| 2.1 | Table 1. Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Negative Per-Protocol Cohort | 23 |
| 2.2 | Table 2. Demographic and Clinical Characteristics at Baseline in the Baseline SARS-CoV-2 Positive Per-Protocol Cohort | 25 |
| 2.3 | Table 3. Sample Sizes of Random Subcohort Strata for Measuring Antibody Markers | 26 |
| 2.4 | 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 | 27 |
| 2.5 | Table 4b. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOQ or $\geq 4 \times$ LLOQ for binding antibody markers by Age | 29 |
| 2.6 | 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 | 33 |
| 2.7 | 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 | 37 |
| 2.8 | Table 4e. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOQ or $\geq 4 \times$ LLOQ for binding antibody markers by Sex | 46 |
| 2.9 | 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 | 50 |
| 2.10 | 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 | 58 |
| 2.11 | Table 4h. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOQ or $\geq 4 \times$ LLOQ for binding antibody markers by Race | 65 |
| 2.12 | 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 | 82 |
| 2.13 | 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 | 87 |
| 2.14 | Table 5a. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by All participants | 98 |
| 2.15 | Table 5b. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Age | 100 |
| 2.16 | 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 | 104 |
| 2.17 | 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 | 108 |

| | |
|---|-----|
| 2.18 Table 5e. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Sex | 117 |
| 2.19 Table 5f. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Age, sex | 121 |
| 2.20 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 | 129 |
| 2.21 Table 5h. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Race | 136 |
| 2.22 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 | 153 |
| 2.23 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 | 158 |
| 2.24 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 | 169 |
| 2.25 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 | 170 |
| 2.26 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 | 172 |
| 2.27 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 | 174 |
| 2.28 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 | 177 |
| 2.29 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 | 179 |
| 2.30 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 | 182 |
| 2.31 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 | 185 |
| 2.32 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 | 191 |
| 2.33 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 | 193 |
| 2.34 Table 7a. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by All participants | 197 |
| 2.35 Table 7b. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age | 202 |
| 2.36 Table 7c. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Risk for Severe Covid-19 | 210 |
| 2.37 Table 7d. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Risk for Severe Covid-19 | 218 |

| | |
|--|-----|
| 2.38 Table 7e. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Sex | 234 |
| 2.39 Table 7f. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, sex | 242 |
| 2.40 Table 7g. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Hispanic or Latino ethnicity | 258 |
| 2.41 Table 7h. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Race | 270 |
| 2.42 Table 7i. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Communities of color | 301 |
| 2.43 Table 7j. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Communities of color | 309 |
| 2.44 Table 8a. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by All participants | 325 |
| 2.45 Table 8b. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age | 328 |
| 2.46 Table 8c. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Risk for Severe Covid-19 | 334 |
| 2.47 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 | 340 |
| 2.48 Table 8e. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Sex | 351 |
| 2.49 Table 8f. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, sex | 357 |
| 2.50 Table 8g. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Hispanic or Latino ethnicity | 368 |
| 2.51 Table 8h. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Race | 377 |
| 2.52 Table 8i. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Communities of color | 401 |
| 2.53 Table 8j. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Communities of color | 407 |
| 2.54 Table 9a. The ratios of GMTs/GMCs between groups by Age | 421 |
| 2.55 Table 9b. The ratios of GMTs/GMCs between groups by Risk for Severe Covid-19 | 426 |
| 2.56 Table 9c. The ratios of GMTs/GMCs between groups by Age < 65, Risk for Severe Covid-19 | 430 |
| 2.57 Table 9d. The ratios of GMTs/GMCs between groups by Age \geq 65, Risk for Severe Covid-19 | 436 |
| 2.58 Table 9e. The ratios of GMTs/GMCs between groups by Sex | 442 |
| 2.59 Table 9f. The ratios of GMTs/GMCs between groups by Hispanic or Latino ethnicity | 446 |
| 2.60 Table 9g. The ratios of GMTs/GMCs between groups by Communities of color | 452 |
| 2.61 Table 10a. Differences in the responder rates, 2FRs, 4FRs between the groups by Arm | 458 |
| 2.62 Table 10b. Differences in the responder rates, 2FRs, 4FRs between the groups by Baseline SARS-CoV-2 | 460 |
| 2.63 Table 10c. Differences in the responder rates, 2FRs, 4FRs between the groups by Age | 462 |

| | |
|---|-----|
| 2.64 Table 10d. Differences in the responder rates, 2FRs, 4FRs between the groups by Risk for Severe Covid-19 | 465 |
| 2.65 Table 10e. Differences in the responder rates, 2FRs, 4FRs between the groups by Age < 65, Risk for Severe Covid-19 | 468 |
| 2.66 Table 10f. Differences in the responder rates, 2FRs, 4FRs between the groups by Age ≥ 65, Risk for Severe Covid-19 | 472 |
| 2.67 Table 10g. Differences in the responder rates, 2FRs, 4FRs between the groups by Sex | 476 |
| 2.68 Table 10h. Differences in the responder rates, 2FRs, 4FRs between the groups by Hispanic or Latino ethnicity | 479 |
| 2.69 Table 10i. Differences in the responder rates, 2FRs, 4FRs between the groups by Communities of color | 483 |
| 2.70 Table 11. Antibody levels in the baseline SARS-CoV-2 negative per-protocol cohort (vaccine vs. placebo) | 487 |
| 2.71 Table 12. Antibody levels in the baseline SARS-CoV-2 positive per-protocol cohort (vaccine vs. placebo) | 489 |
| 2.72 Table 13. Antibody levels in the per-protocol cohort (vaccine recipients) | 491 |
| 2.73 Table 14. Antibody levels in the per-protocol cohort (placebo recipients) | 493 |

List of Figures

| | | |
|------|---|-----|
| 3.1 | Pair plots of D29 Ab markers: baseline negative vaccine arm | 496 |
| 3.2 | Pair plots of D57 Ab markers: baseline negative vaccine arm | 497 |
| 3.3 | Pair plots of D29 fold-rise over D1 Ab markers: baseline negative vaccine arm | 498 |
| 3.4 | Pair plots of D57 fold-rise over D1 Ab markers: baseline negative vaccine arm | 499 |
| 3.5 | Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline negative vaccine arm . . | 500 |
| 3.6 | Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative vaccine arm . . | 501 |
| 3.7 | Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative vaccine arm . . | 502 |
| 3.8 | Pair plots of D1, D29 and D57 nAb Neutralization 50% Titer: baseline negative vaccine arm | 503 |
| 3.9 | Pair plots of D1, D29 and D57 nAb Neutralization 80% Titer: Baseline negative vaccine arm | 504 |
| 3.10 | Pair plots of D29 Ab markers: baseline positive vaccine arm | 505 |
| 3.11 | Pair plots of D57 Ab markers: baseline positive vaccine arm | 506 |
| 3.12 | Pair plots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm | 507 |
| 3.13 | Pair plots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm | 508 |
| 3.14 | Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline positive vaccine arm . . | 509 |
| 3.15 | Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline positive vaccine arm . . | 510 |
| 3.16 | Pair plots of D1, D29 and D57 Binding Antibody to N: baseline positive vaccine arm | 511 |
| 3.17 | Pair plots of D1, D29 and D57 nAb Neutralization 50% Titer: baseline positive vaccine arm . | 512 |
| 3.18 | Pair plots of D1, D29 and D57 nAb Neutralization 80% Titer: Baseline positive vaccine arm | 513 |
| 3.19 | Pair plots of D29 Ab markers: baseline positive placebo arm | 514 |
| 3.20 | Pair plots of D57 Ab markers: baseline positive placebo arm | 515 |
| 3.21 | Pair plots of D29 fold-rise over D1 Ab markers: baseline positive placebo arm | 516 |
| 3.22 | Pair plots of D57 fold-rise over D1 Ab markers: baseline positive placebo arm | 517 |
| 3.23 | Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline positive placebo arm . . | 518 |
| 3.24 | Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline positive placebo arm . . | 519 |
| 3.25 | Pair plots of D1, D29 and D57 Binding Antibody to N: baseline positive placebo arm | 520 |
| 3.26 | Pair plots of D1, D29 and D57 nAb Neutralization 50% Titer: baseline positive placebo arm . | 521 |
| 3.27 | Pair plots of D1, D29 and D57 nAb Neutralization 80% Titer: Baseline positive placebo arm | 522 |
| 3.28 | RCDF plots for D29 Ab markers: by baseline status x randomization arm | 523 |

| | |
|---|-----|
| 3.29 RCDF plots for D57 Ab markers: by baseline status x randomization arm | 524 |
| 3.30 RCDF plots for D29 fold-rise over D1 Ab markers: by baseline status x randomization arm | 525 |
| 3.31 RCDF plots for D57 fold-rise over D1 Ab markers: by baseline status x randomization arm | 526 |
| 3.32 RCDF plots for D29 bAb markers: by baseline status for the vaccine arm | 527 |
| 3.33 RCDF plots for D29 nAb markers: by baseline status for the vaccine arm | 527 |
| 3.34 RCDF plots for D57 bAb markers: by baseline status for the vaccine arm | 528 |
| 3.35 RCDF plots for D57 nAb markers: by baseline status for the vaccine arm | 528 |
| 3.36 RCDF plots for D29 over D1 fold-rise bAb markers: by baseline status for the vaccine arm | 529 |
| 3.37 RCDF plots for D29 over D1 fold-rise nAb markers: by baseline status for the vaccine arm | 529 |
| 3.38 RCDF plots for D57 fold-rise over D1 bAb markers: by baseline status for the vaccine arm | 530 |
| 3.39 RCDF plots for D57 fold-rise over D1 nAb markers: by baseline status for the vaccine arm | 530 |
| 3.40 RCDF plots for D29 bAb markers: baseline negative vaccine arm | 531 |
| 3.41 RCDF plots for D29 nAb markers: baseline negative vaccine arm | 531 |
| 3.42 RCDF plots for D57 bAb markers: baseline negative vaccine arm | 532 |
| 3.43 RCDF plots for D57 nAb markers: baseline negative vaccine arm | 532 |
| 3.44 RCDF plots for D29 fold-rise over D1 bAb markers: baseline negative vaccine arm | 533 |
| 3.45 RCDF plots for D29 fold-rise over D1 nAb markers: baseline negative vaccine arm | 533 |
| 3.46 RCDF plots for D57 fold-rise over D1 bAb markers: baseline negative vaccine arm | 534 |
| 3.47 RCDF plots for D57 fold-rise over D1 nAb markers: baseline negative vaccine arm | 534 |
| 3.48 RCDF plots for D29 bAb markers: baseline positive vaccine arm | 535 |
| 3.49 RCDF plots for D29 nAb markers: baseline positive vaccine arm | 535 |
| 3.50 RCDF plots for D57 bAb markers: baseline positive vaccine arm | 536 |
| 3.51 RCDF plots for D57 nAb markers: baseline positive vaccine arm | 536 |
| 3.52 RCDF plots for D29 fold-rise over D1 bAb markers: baseline positive vaccine arm | 537 |
| 3.53 RCDF plots for D29 fold-rise over D1 nAb markers: baseline positive vaccine arm | 537 |
| 3.54 RCDF plots for D57 fold-rise over D1 bAb markers: baseline positive vaccine arm | 538 |
| 3.55 RCDF plots for D57 fold-rise over D1 nAb markers: baseline positive vaccine arm | 538 |
| 3.56 Scatter plots for D1 Ab markers vs. age: baseline negative vaccine arm | 539 |
| 3.57 Scatter plots for D29 Ab markers vs. age: baseline negative vaccine arm | 540 |
| 3.58 Scatter plots for D57 Ab markers vs. age: baseline negative vaccine arm | 541 |
| 3.59 Scatter plots for D1 Ab markers vs. age: baseline positive vaccine arm | 542 |
| 3.60 Scatter plots for D29 Ab markers vs. age: baseline positive vaccine arm | 543 |
| 3.61 Scatter plots for D57 Ab markers vs. age: baseline positive vaccine arm | 544 |
| 3.62 Scatter plots for D1 Ab markers vs. age: baseline positive placebo arm | 545 |
| 3.63 Scatter plots for D29 Ab markers vs. age: baseline positive placebo arm | 546 |
| 3.64 Scatter plots for D57 Ab markers vs. age: baseline positive placebo arm | 547 |

| | |
|---|-----|
| 3.65 Scatter plots for D1 Ab markers vs. age: baseline negative placebo arm | 548 |
| 3.66 Scatter plots for D29 Ab markers vs. age: baseline negative placebo arm | 549 |
| 3.67 Scatter plots for D57 Ab markers vs. age: baseline negative placebo arm | 550 |
| 3.68 Boxplots of D1 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 551 |
| 3.69 Boxplots of D29 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 552 |
| 3.70 Boxplots of D57 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 553 |
| 3.71 Boxplots of D29 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms . . . | 554 |
| 3.72 Boxplots of D57 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms . . . | 555 |
| 3.73 Boxplots of D1 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 556 |
| 3.74 Boxplots of D29 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 557 |
| 3.75 Boxplots of D57 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 558 |
| 3.76 Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms . . . | 559 |
| 3.77 Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms . . . | 560 |
| 3.78 Boxplots of D1 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 561 |
| 3.79 Boxplots of D29 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 562 |
| 3.80 Boxplots of D57 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 563 |
| 3.81 Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm . . . | 564 |
| 3.82 Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm . . . | 565 |
| 3.83 Boxplots of D1 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 566 |
| 3.84 Boxplots of D29 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 567 |
| 3.85 Boxplots of D57 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 568 |

| | |
|---|-----|
| 3.86 Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative placebo arm | 569 |
| 3.87 Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative placebo arm | 570 |
| 3.88 Spaghetti plots of Ab markers over time: baseline negative vaccine + placebo arm | 571 |
| 3.89 Spaghetti plots of Ab markers over time: baseline positive vaccine + placebo arm | 572 |
| 3.90 RCDF plots for D29 Ab markers: baseline negative vaccine arm by age groups. | 573 |
| 3.91 RCDF plots for D57 Ab markers: baseline negative vaccine arm by age groups. | 574 |
| 3.92 RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups. | 575 |
| 3.93 RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups. | 576 |
| 3.94 RCDF plots for D29 Ab markers: baseline negative vaccine arm by high-risk condition. | 577 |
| 3.95 RCDF plots for D57 Ab markers: baseline negative vaccine arm by high-risk condition. | 578 |
| 3.96 RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition. | 579 |
| 3.97 RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition. | 580 |
| 3.98 RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and high-risk condition. | 581 |
| 3.99 RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and high-risk condition. | 582 |
| 3.100RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition. | 583 |
| 3.101RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition. | 584 |
| 3.102RCDF plots for D29 Ab markers: baseline negative vaccine arm by sex assigned at birth. | 585 |
| 3.103RCDF plots for D57 Ab markers: baseline negative vaccine arm by sex assigned at birth. | 586 |
| 3.104RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth. | 587 |
| 3.105RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth. | 588 |
| 3.106RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and sex assigned at birth. | 589 |
| 3.107RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and sex assigned at birth. | 590 |
| 3.108RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex assigned at birth. | 591 |
| 3.109RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex at birth. | 592 |
| 3.110RCDF plots for D29 Ab markers: baseline negative vaccine arm by ethnicity. | 593 |
| 3.111RCDF plots for D57 Ab markers: baseline negative vaccine arm by ethnicity. | 594 |
| 3.112RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity. | 595 |
| 3.113RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity. | 596 |
| 3.114RCDF plots for D29 Ab markers: baseline negative vaccine arm by race. | 597 |
| 3.115RCDF plots for D57 Ab markers: baseline negative vaccine arm by race. | 598 |

| | |
|--|-----|
| 3.116RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by race. | 599 |
| 3.117RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by race. | 600 |
| 3.118RCDF plots for D29 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group. | 601 |
| 3.119RCDF plots for D57 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group. | 602 |
| 3.120RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichoto- mous classification of race and ethnic group. | 603 |
| 3.121RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichoto- mous classification of race and ethnic group. | 604 |
| 3.122RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. | 605 |
| 3.123RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. | 606 |
| 3.124RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. | 607 |
| 3.125RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. | 608 |
| 3.126RCDF plots for D29 Ab markers: baseline positive vaccine arm by age groups. | 609 |
| 3.127RCDF plots for D57 Ab markers: baseline positive vaccine arm by age groups. | 610 |
| 3.128RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups. | 611 |
| 3.129RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups. | 612 |
| 3.130RCDF plots for D29 Ab markers: baseline positive vaccine arm by high-risk condition. | 613 |
| 3.131RCDF plots for D57 Ab markers: baseline positive vaccine arm by high-risk condition. | 614 |
| 3.132RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition. | 615 |
| 3.133RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition. | 616 |
| 3.134RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and high-risk condition. | 617 |
| 3.135RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and high-risk condition. | 618 |
| 3.136RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition. | 619 |
| 3.137RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition. | 620 |
| 3.138RCDF plots for D29 Ab markers: baseline positive vaccine arm by sex assigned at birth. | 621 |
| 3.139RCDF plots for D57 Ab markers: baseline positive vaccine arm by sex assigned at birth. | 622 |
| 3.140RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth. | 623 |
| 3.141RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth. | 624 |
| 3.142RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and sex assigned at birth. | 625 |

| | |
|---|-----|
| 3.143RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and sex assigned at birth. | 626 |
| 3.144RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth. | 627 |
| 3.145RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth. | 628 |
| 3.146RCDF plots for D29 Ab markers: baseline positive vaccine arm by ethnicity. | 629 |
| 3.147RCDF plots for D57 Ab markers: baseline positive vaccine arm by ethnicity. | 630 |
| 3.148RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity. | 631 |
| 3.149RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity. | 632 |
| 3.150RCDF plots for D29 Ab markers: baseline positive vaccine arm by race. | 633 |
| 3.151RCDF plots for D57 Ab markers: baseline positive vaccine arm by race. | 634 |
| 3.152RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race. | 635 |
| 3.153RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race. | 636 |
| 3.154RCDF plots for D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. | 637 |
| 3.155RCDF plots for D57 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. | 638 |
| 3.156RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. | 639 |
| 3.157RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. | 640 |
| 3.158RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. | 641 |
| 3.159RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. | 642 |
| 3.160RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. | 643 |
| 3.161RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. | 644 |
| 3.162RCDF plots for D29 Ab markers: baseline positive placebo arm by age groups. | 645 |
| 3.163RCDF plots for D57 Ab markers: baseline positive placebo arm by age groups. | 646 |
| 3.164RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age groups. | 647 |
| 3.165RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by age groups. | 648 |
| 3.166RCDF plots for D29 Ab markers: baseline positive placebo arm by high-risk condition. | 649 |
| 3.167RCDF plots for D57 Ab markers: baseline positive placebo arm by high-risk condition. | 650 |
| 3.168RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by high-risk condition. | 651 |
| 3.169RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by high-risk condition. | 652 |
| 3.170RCDF plots for D29 Ab markers: baseline positive placebo arm by age and high-risk condition. | 653 |

| | |
|---|-----|
| 3.171RCDF plots for D57 Ab markers: baseline positive placebo arm by age and high-risk condition. | 654 |
| 3.172RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age and high-risk condition. | 655 |
| 3.173RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by age and high-risk condition. | 656 |
| 3.174RCDF plots for D29 Ab markers: baseline positive placebo arm by sex assigned at birth. | 657 |
| 3.175RCDF plots for D57 Ab markers: baseline positive placebo arm by sex assigned at birth. | 658 |
| 3.176RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by sex assigned at birth. | 659 |
| 3.177RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by sex assigned at birth. | 660 |
| 3.178RCDF plots for D29 Ab markers: baseline positive placebo arm by age and sex assigned at birth. | 661 |
| 3.179RCDF plots for D57 Ab markers: baseline positive placebo arm by age and sex assigned at birth. | 662 |
| 3.180RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age and sex assigned at birth. | 663 |
| 3.181RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by age and sex assigned at birth. | 664 |
| 3.182RCDF plots for D29 Ab markers: baseline positive placebo arm by ethnicity. | 665 |
| 3.183RCDF plots for D57 Ab markers: baseline positive placebo arm by ethnicity. | 666 |
| 3.184RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by ethnicity. | 667 |
| 3.185RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by ethnicity. | 668 |
| 3.186RCDF plots for D29 Ab markers: baseline positive placebo arm by race. | 669 |
| 3.187RCDF plots for D57 Ab markers: baseline positive placebo arm by race. | 670 |
| 3.188RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by race. | 671 |
| 3.189RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by race. | 672 |
| 3.190RCDF plots for D29 Ab markers: baseline positive placebo arm by dichotomous classification of race and ethnic group. | 673 |
| 3.191RCDF plots for D57 Ab markers: baseline positive placebo arm by dichotomous classification of race and ethnic group. | 674 |
| 3.192RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by dichotomous classification of race and ethnic group. | 675 |
| 3.193RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by dichotomous classification of race and ethnic group. | 676 |
| 3.194RCDF plots for D29 Ab markers: baseline positive placebo arm by age and dichotomous classification of race and ethnic group. | 677 |
| 3.195RCDF plots for D57 Ab markers: baseline positive placebo arm by age and dichotomous classification of race and ethnic group. | 678 |
| 3.196RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age and dichotomous classification of race and ethnic group. | 679 |

| | |
|---|-----|
| 3.197RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by age and dichotomous classification of race and ethnic group. | 680 |
| 3.198Boxplots of D29 Ab markers: Baseline negative vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 681 |
| 3.199Boxplots of D57 Ab markers: Baseline negative vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 682 |
| 3.200Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age group. | 683 |
| 3.201Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age group. | 684 |
| 3.202Boxplots of D29 Ab markers: Baseline negative vaccine arm by high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 685 |
| 3.203Boxplots of D57 Ab markers: Baseline negative vaccine arm by high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 686 |
| 3.204Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by high-risk condition. | 687 |
| 3.205Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by high-risk condition. | 688 |
| 3.206Boxplots of D29 Ab markers: Baseline negative vaccine arm by age and high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 689 |
| 3.207Boxplots of D57 Ab markers: Baseline negative vaccine arm by age and high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 690 |
| 3.208Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and high-risk condition. | 691 |
| 3.209Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and high-risk condition. | 692 |
| 3.210Boxplots of D29 Ab markers: Baseline negative vaccine arm by sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 693 |
| 3.211Boxplots of D57 Ab markers: Baseline negative vaccine arm by sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 694 |
| 3.212Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by sex assigned at birth. | 695 |
| 3.213Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by sex assigned at birth. | 696 |

| | |
|---|-----|
| 3.214Boxplots of D29 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 697 |
| 3.215Boxplots of D57 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 698 |
| 3.216Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth. | 699 |
| 3.217Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth. | 700 |
| 3.218Boxplots of D29 Ab markers: Baseline negative vaccine arm by ethnicity. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 701 |
| 3.219Boxplots of D57 Ab markers: Baseline negative vaccine arm by ethnicity. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 702 |
| 3.220Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity. | 703 |
| 3.221Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity. | 704 |
| 3.222Boxplots of D29 Ab markers: Baseline negative vaccine arm by race. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 705 |
| 3.223Boxplots of D57 Ab markers: Baseline negative vaccine arm by race. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 706 |
| 3.224Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race. | 707 |
| 3.225Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race. | 708 |
| 3.226Boxplots of D29 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 709 |
| 3.227Boxplots of D57 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 710 |
| 3.228Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group. | 711 |
| 3.229Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group. | 712 |
| 3.230Boxplots of D29 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 713 |

| | |
|---|-----|
| 3.231Boxplots of D57 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 714 |
| 3.232Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. | 715 |
| 3.233Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. | 716 |
| 3.234Boxplots of D29 Ab markers: baseline positive vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 717 |
| 3.235Boxplots of D57 Ab markers: baseline positive vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 718 |
| 3.236Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group. | 719 |
| 3.237Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group. | 720 |
| 3.238Boxplots of D29 Ab markers: baseline positive vaccine arm by high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 721 |
| 3.239Boxplots of D57 Ab markers: baseline positive vaccine arm by high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 722 |
| 3.240Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition. | 723 |
| 3.241Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition. | 724 |
| 3.242Boxplots of D29 Ab markers: baseline positive vaccine arm by age and high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 725 |
| 3.243Boxplots of D57 Ab markers: baseline positive vaccine arm by age and high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 726 |
| 3.244Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition. | 727 |
| 3.245Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition. | 728 |
| 3.246Boxplots of D29 Ab markers: baseline positive vaccine arm by sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 729 |

| | |
|---|-----|
| 3.247Boxplots of D57 Ab markers: baseline positive vaccine arm by sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 730 |
| 3.248Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth. | 731 |
| 3.249Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth. | 732 |
| 3.250Boxplots of D29 Ab markers: baseline positive vaccine arm by age and sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 733 |
| 3.251Boxplots of D57 Ab markers: baseline positive vaccine arm by age and sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 734 |
| 3.252Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth. | 735 |
| 3.253Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth. | 736 |
| 3.254Boxplots of D29 Ab markers: baseline positive vaccine arm by ethnicity The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 737 |
| 3.255Boxplots of D57 Ab markers: baseline positive vaccine arm by ethnicity. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 738 |
| 3.256Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity. | 739 |
| 3.257Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity. | 740 |
| 3.258Boxplots of D29 Ab markers: baseline positive vaccine arm by race. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 741 |
| 3.259Boxplots of D57 Ab markers: baseline positive vaccine arm by race. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 742 |
| 3.260Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race. | 743 |
| 3.261Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race. | 744 |
| 3.262Boxplots of D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 745 |
| 3.263Boxplots of D57 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 746 |
| 3.264Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. | 747 |

| | |
|---|-----|
| 3.265Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. | 748 |
| 3.266Boxplots of D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 749 |
| 3.267Boxplots of D57 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively. | 750 |
| 3.268Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. | 751 |
| 3.269Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. | 752 |

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Chapter 1

Disclaimers

- The data presented in the analysis originated from the Moderna Sponsored mRNA-1273-P301 clinical study and are provided to NIAID in accordance with Clinical Trial Agreement between the parties. The study was funded in part by BARDA under Government Contract No. 75A50120C00034
- The preliminary immunogenicity data presented here do not reflect the Sponsors statistical analysis plan and therefore should not be interpreted as a protocol defined read-out of the clinical study.
- These data are not to be disclosed without written permission of Moderna.

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Chapter 2

Tabular Description of Immunogenicity Data

2.1 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 = 747) | Placebo (N = 138) | Total (N = 885) |
|--------------------------------------|----------------------|----------------------|--------------------|
| Age | | | |
| Age < 65 | 357 (47.8%) | 72 (52.2%) | 429 (48.5%) |
| Age ≥ 65 | 390 (52.2%) | 66 (47.8%) | 456 (51.5%) |
| Mean (Range) | 58.5 (18.0, 85.0) | 58.3 (18.0, 85.0) | 58.5 (18.0, 85.0) |
| BMI | | | |
| Mean ± SD | 29.7 ± 6.6 | 31.4 ± 6.3 | 30.0 ± 6.6 |
| Risk for Severe Covid-19 | | | |
| At-risk | 381 (51.0%) | 71 (51.4%) | 452 (51.1%) |
| Not at-risk | 366 (49.0%) | 67 (48.6%) | 433 (48.9%) |
| Age, Risk for Severe Covid-19 | | | |
| Age < 65 At-risk | 185 (24.8%) | 36 (26.1%) | 221 (25.0%) |
| Age < 65 Not at-risk | 172 (23.0%) | 36 (26.1%) | 208 (23.5%) |
| Age ≥ 65 | 390 (52.2%) | 66 (47.8%) | 456 (51.5%) |
| Sex | | | |
| Female | 427 (57.2%) | 75 (54.3%) | 502 (56.7%) |
| Male | 320 (42.8%) | 63 (45.7%) | 383 (43.3%) |
| Hispanic or Latino ethnicity | | | |
| Hispanic or Latino | 99 (13.3%) | 20 (14.5%) | 119 (13.4%) |
| Not Hispanic or Latino | 623 (83.4%) | 113 (81.9%) | 736 (83.2%) |
| Not reported and unknown | 25 (3.3%) | 5 (3.6%) | 30 (3.4%) |
| Race | | | |
| White | 397 (53.1%) | 74 (53.6%) | 471 (53.2%) |
| Black or African American | 184 (24.6%) | 40 (29.0%) | 224 (25.3%) |

(continued)

| Characteristics | Vaccine (N = 747) | Placebo (N = 138) | Total (N = 885) |
|---|----------------------|----------------------|--------------------|
| Asian | 56 (7.5%) | 10 (7.2%) | 66 (7.5%) |
| American Indian or Alaska Native | 16 (2.1%) | 2 (1.4%) | 18 (2.0%) |
| Native Hawaiian or Other Pacific Islander | 17 (2.3%) | 2 (1.4%) | 19 (2.1%) |
| Multiracial | 57 (7.6%) | 8 (5.8%) | 65 (7.3%) |
| Other | 16 (2.1%) | 1 (0.7%) | 17 (1.9%) |
| Not reported and unknown | 4 (0.5%) | 1 (0.7%) | 5 (0.6%) |
| White Non-Hispanic | 370 (49.5%) | 63 (45.7%) | 433 (48.9%) |
| Communities of Color | 377 (50.5%) | 75 (54.3%) | 452 (51.1%) |

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).

2.2 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 = 234) | Placebo (N = 241) | Total (N = 475) |
|---|----------------------|----------------------|--------------------|
| Age | | | |
| Age < 65 | 114 (48.7%) | 120 (49.8%) | 234 (49.3%) |
| Age ≥ 65 | 120 (51.3%) | 121 (50.2%) | 241 (50.7%) |
| Mean (Range) | 58.3 (18.0, 85.0) | 56.3 (18.0, 85.0) | 57.3 (18.0, 85.0) |
| BMI | | | |
| Mean ± SD | 29.7 ± 7.5 | 30.0 ± 6.6 | 29.9 ± 7.0 |
| Risk for Severe Covid-19 | | | |
| At-risk | 111 (47.4%) | 117 (48.5%) | 228 (48.0%) |
| Not at-risk | 123 (52.6%) | 124 (51.5%) | 247 (52.0%) |
| Age, Risk for Severe Covid-19 | | | |
| Age < 65 At-risk | 56 (23.9%) | 59 (24.5%) | 115 (24.2%) |
| Age < 65 Not at-risk | 58 (24.8%) | 61 (25.3%) | 119 (25.1%) |
| Age ≥ 65 | 120 (51.3%) | 121 (50.2%) | 241 (50.7%) |
| Sex | | | |
| Female | 139 (59.4%) | 133 (55.2%) | 272 (57.3%) |
| Male | 95 (40.6%) | 108 (44.8%) | 203 (42.7%) |
| Hispanic or Latino ethnicity | | | |
| Hispanic or Latino | 31 (13.2%) | 34 (14.1%) | 65 (13.7%) |
| Not Hispanic or Latino | 194 (82.9%) | 201 (83.4%) | 395 (83.2%) |
| Not reported and unknown | 9 (3.8%) | 6 (2.5%) | 15 (3.2%) |
| Race | | | |
| White | 126 (53.8%) | 129 (53.5%) | 255 (53.7%) |
| Black or African American | 58 (24.8%) | 45 (18.7%) | 103 (21.7%) |
| Asian | 19 (8.1%) | 27 (11.2%) | 46 (9.7%) |
| American Indian or Alaska Native | 10 (4.3%) | 7 (2.9%) | 17 (3.6%) |
| Native Hawaiian or Other Pacific Islander | 4 (1.7%) | 2 (0.8%) | 6 (1.3%) |
| Multiracial | 10 (4.3%) | 16 (6.6%) | 26 (5.5%) |
| Other | 7 (3.0%) | 13 (5.4%) | 20 (4.2%) |
| Not reported and unknown | | 2 (0.8%) | 2 (0.4%) |
| White Non-Hispanic | 118 (50.4%) | 121 (50.2%) | 239 (50.3%) |
| Communities of Color | 116 (49.6%) | 120 (49.8%) | 236 (49.7%) |

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).

2.3 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=1360 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 | 154 | 78 | 67 | 236 | 107 | 105 | 48 | 24 | 23 | 72 | 32 | 35 |
| Estimated | 741 | 852 | 1837 | 1617 | 2113 | 3967 | 69 | 111 | 198 | 182 | 210 | 464 |
| Placebo | | | | | | | | | | | | |
| Observed | 26 | 18 | 18 | 40 | 18 | 18 | 43 | 19 | 23 | 78 | 40 | 38 |
| Estimated | 853 | 872 | 1749 | 1907 | 1920 | 3802 | 73 | 83 | 177 | 159 | 209 | 424 |

Demographic covariate strata:

1. Age ≥ 65 , Minority
2. Age < 65 , At risk, Minority
3. Age < 65 , Not at risk, Minority
4. Age ≥ 65 , Non-Minority
5. Age < 65 , At risk, Non-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.

2.4 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 (BAU/ml) | 747 | 6899.3/11127 = 62.0% (57.4%, 66.4%) | 8863.3/11127 = 79.7% (75.5%, 83.2%) | 7382/11127 = 66.3% (61.8%, 70.6%) |
| | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 747 | 10953.9/11127 = 98.4% (96.6%, 99.3%) | 11116.1/11127 = 99.9% (99.3%, 100.0%) | 10953.9/11127 = 98.4% (96.6%, 99.3%) |
| | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 747 | 11038.8/11127 = 99.2% (97.7%, 99.7%) | 11127/11127 = 100.0% (100.0%, 100.0%) | 11107.3/11127 = 99.8% (98.7%, 100.0%) |
| | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 234 | 940.6/1234 = 76.2% (68.6%, 82.5%) | 1072.9/1234 = 86.9% (79.9%, 91.8%) | 986.1/1234 = 79.9% (72.4%, 85.8%) |
| | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 234 | 1229.4/1234 = 99.6% (97.4%, 99.9%) | 1234/1234 = 100.0% (100.0%, 100.0%) | 1229.4/1234 = 99.6% (97.4%, 99.9%) |
| | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 234 | 1225.4/1234 = 99.3% (95.1%, 99.9%) | 1234/1234 = 100.0% (100.0%, 100.0%) | 1225.4/1234 = 99.3% (95.1%, 99.9%) |
| | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 241 | 602.3/1125 = 53.5% (45.7%, 61.2%) | 824.8/1125 = 73.3% (65.5%, 79.9%) | 658/1125 = 58.5% (50.5%, 66.1%) |
| | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 241 | 1064/1125 = 94.6% (88.4%, 97.6%) | 1108.6/1125 = 98.5% (93.8%, 99.7%) | 1064/1125 = 94.6% (88.4%, 97.6%) |
| | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 241 | 1090.8/1125 = 97.0% (92.1%, 98.9%) | 1125/1125 = 100.0% (100.0%, 100.0%) | 1106.1/1125 = 98.3% (93.3%, 99.6%) |
| | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 747 | 9051.8/11127 = 81.4% (77.3%, 84.8%) | 10115.3/11127 = 90.9% (87.8%, 93.3%) | 9379.2/11127 = 84.3% (80.4%, 87.5%) |

(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 (BAU/ml) | 747 | 11107.3/11127 = 99.8% (98.7%, 100.0%) | 11127/11127 = 100.0% (100.0%, 100.0%) | 11107.3/11127 = 99.8% (98.7%, 100.0%) |
| | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 747 | 11127/11127 = 100.0% (100.0%, 100.0%) | 11127/11127 = 100.0% (100.0%, 100.0%) | 11127/11127 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 234 | 1179.1/1234 = 95.5% (89.9%, 98.1%) | 1187.7/1234 = 96.2% (90.7%, 98.5%) | 1179.1/1234 = 95.5% (89.9%, 98.1%) |
| | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 241 | 863.2/1125 = 76.7% (68.9%, 83.0%) | 970.3/1125 = 86.2% (79.2%, 91.2%) | 885.4/1125 = 78.7% (71.0%, 84.8%) |
| | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 1125/1125 = 100.0% (100.0%, 100.0%) | 1125/1125 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 1125/1125 = 100.0% (100.0%, 100.0%) | 1125/1125 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 357 | 5010.4/8769 = 57.1% (51.5%, 62.6%) | 6653.5/8769 = 75.9% (70.7%, 80.4%) | 5393/8769 = 61.5% (55.9%, 66.8%) |
| Age < 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 357 | 8595.9/8769 = 98.0% (95.7%, 99.1%) | 8758.1/8769 = 99.9% (99.1%, 100.0%) | 8595.9/8769 = 98.0% (95.7%, 99.1%) |
| Age < 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 357 | 8680.8/8769 = 99.0% (97.1%, 99.7%) | 8769/8769 = 100.0% (100.0%, 100.0%) | 8749.3/8769 = 99.8% (98.4%, 100.0%) |
| Age < 65 | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 114 | 707.6/983 = 72.0% (62.6%, 79.8%) | 828.4/983 = 84.3% (75.5%, 90.3%) | 749.2/983 = 76.2% (66.9%, 83.6%) |
| Age < 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 114 | 978.4/983 = 99.5% (96.7%, 99.9%) | 983/983 = 100.0% (100.0%, 100.0%) | 978.4/983 = 99.5% (96.7%, 99.9%) |
| Age < 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 114 | 974.4/983 = 99.1% (93.9%, 99.9%) | 983/983 = 100.0% (100.0%, 100.0%) | 974.4/983 = 99.1% (93.9%, 99.9%) |
| Age < 65 | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 72 | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) |
| Age < 65 | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 72 | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) |
| Age < 65 | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 72 | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) |
| Age < 65 | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 420.2/893 = 47.1% (37.6%, 56.7%) | 617.2/893 = 69.1% (59.4%, 77.4%) | 465.7/893 = 52.2% (42.5%, 61.7%) |
| Age < 65 | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 832/893 = 93.2% (85.5%, 96.9%) | 876.6/893 = 98.2% (92.2%, 99.6%) | 832/893 = 93.2% (85.5%, 96.9%) |
| Age < 65 | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 858.8/893 = 96.2% (90.1%, 98.6%) | 893/893 = 100.0% (100.0%, 100.0%) | 874.1/893 = 97.9% (91.6%, 99.5%) |
| Age < 65 | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 357 | 6835.8/8769 = 78.0% (72.9%, 82.3%) | 7815.7/8769 = 89.1% (85.2%, 92.1%) | 7128.2/8769 = 81.3% (76.4%, 85.3%) |
| Age < 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 357 | 8749.3/8769 = 99.8% (98.4%, 100.0%) | 8769/8769 = 100.0% (100.0%, 100.0%) | 8749.3/8769 = 99.8% (98.4%, 100.0%) |
| Age < 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 357 | 8769/8769 = 100.0% (100.0%, 100.0%) | 8769/8769 = 100.0% (100.0%, 100.0%) | 8769/8769 = 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 (BAU/ml) | 114 | 928.1/983 = 94.4% (87.4%, 97.6%) | 936.7/983 = 95.3% (88.3%, 98.2%) | 928.1/983 = 94.4% (87.4%, 97.6%) |
| Age < 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 114 | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 114 | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 72 | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) |
| Age < 65 | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 72 | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) |
| Age < 65 | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 72 | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) |
| Age < 65 | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 651.2/893 = 72.9% (63.3%, 80.8%) | 750.2/893 = 84.0% (75.2%, 90.1%) | 669.4/893 = 75.0% (65.4%, 82.6%) |
| Age < 65 | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 893/893 = 100.0% (100.0%, 100.0%) | 893/893 = 100.0% (100.0%, 100.0%) | 893/893 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 893/893 = 100.0% (100.0%, 100.0%) | 893/893 = 100.0% (100.0%, 100.0%) | 893/893 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 390 | 1888.8/2358 = 80.1% (75.8%, 83.8%) | 2209.9/2358 = 93.7% (90.7%, 95.8%) | 1989/2358 = 84.4% (80.3%, 87.7%) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 390 | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 390 | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 120 | 233/251 = 92.8% (86.0%, 96.4%) | 244.5/251 = 97.4% (91.9%, 99.2%) | 236.9/251 = 94.4% (87.9%, 97.5%) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 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 (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 182.1/232 = 78.5% (70.1%, 85.0%) | 207.5/232 = 89.5% (82.5%, 93.8%) | 192.3/232 = 82.9% (75.0%, 88.6%) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 390 | 2216/2358 = 94.0% (91.1%, 96.0%) | 2299.7/2358 = 97.5% (95.4%, 98.7%) | 2251/2358 = 95.5% (92.9%, 97.1%) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 390 | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 390 | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 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 (BAU/ml) | 121 | 212/232 = 91.4% (84.6%, 95.3%) | 220.1/232 = 94.9% (89.0%, 97.7%) | 216/232 = 93.1% (86.7%, 96.5%) |
| Age ≥ 65 | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 381 | 2604.4/4152.9 = 62.7% (57.0%, 68.1%) | 3368.7/4152.9 = 81.1% (76.0%, 85.4%) | 2802.3/4152.9 = 67.5% (61.8%, 72.7%) |
| At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 381 | 4082.7/4152.9 = 98.3% (95.5%, 99.4%) | 4142/4152.9 = 99.7% (98.1%, 100.0%) | 4082.7/4152.9 = 98.3% (95.5%, 99.4%) |
| At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 381 | 4102.5/4152.9 = 98.8% (96.2%, 99.6%) | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) | 4133.1/4152.9 = 99.5% (96.7%, 99.9%) |
| At-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 111 | 309.1/440.4 = 70.2% (59.4%, 79.1%) | 382.5/440.4 = 86.9% (77.1%, 92.9%) | 334.8/440.4 = 76.0% (65.4%, 84.2%) |
| At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 111 | 435.8/440.4 = 98.9% (92.7%, 99.9%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 435.8/440.4 = 98.9% (92.7%, 99.9%) |
| At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 111 | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 71 | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 71 | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 71 | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 117 | 255.1/404.4 = 63.1% (52.8%, 72.3%) | 308/404.4 = 76.2% (66.1%, 83.9%) | 263.5/404.4 = 65.2% (54.8%, 74.2%) |
| At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 117 | 399.2/404.4 = 98.7% (91.1%, 99.8%) | 399.2/404.4 = 98.7% (91.1%, 99.8%) | 399.2/404.4 = 98.7% (91.1%, 99.8%) |
| At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 117 | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 381 | 3426/4152.9 = 82.5% (77.4%, 86.6%) | 3743.9/4152.9 = 90.2% (85.8%, 93.3%) | 3563.2/4152.9 = 85.8% (81.0%, 89.6%) |
| At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 381 | 4133.1/4152.9 = 99.5% (96.7%, 99.9%) | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) | 4133.1/4152.9 = 99.5% (96.7%, 99.9%) |
| At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 381 | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) | 4152.9/4152.9 = 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 |
|-------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| At-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 111 | 429.2/440.4 = 97.5% (89.9%, 99.4%) | 429.2/440.4 = 97.5% (89.9%, 99.4%) | 429.2/440.4 = 97.5% (89.9%, 99.4%) |
| At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 111 | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 111 | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 71 | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 71 | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 71 | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 117 | 343.7/404.4 = 85.0% (75.9%, 91.1%) | 369.9/404.4 = 91.5% (83.3%, 95.8%) | 356.2/404.4 = 88.1% (79.4%, 93.4%) |
| At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 117 | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 117 | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 366 | 4294.9/6974.1 = 61.6% (55.1%, 67.7%) | 5494.6/6974.1 = 78.8% (72.8%, 83.8%) | 4579.7/6974.1 = 65.7% (59.2%, 71.6%) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 366 | 6871.1/6974.1 = 98.5% (95.4%, 99.5%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6871.1/6974.1 = 98.5% (95.4%, 99.5%) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 366 | 6936.3/6974.1 = 99.5% (96.2%, 99.9%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 123 | 631.5/793.6 = 79.6% (68.6%, 87.4%) | 690.3/793.6 = 87.0% (76.6%, 93.2%) | 651.3/793.6 = 82.1% (71.1%, 89.5%) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 123 | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 123 | 785/793.6 = 98.9% (92.5%, 99.9%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 785/793.6 = 98.9% (92.5%, 99.9%) |

(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 (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 124 | 347.2/720.6 = 48.2% (37.5%, 59.0%) | 516.8/720.6 = 71.7% | 394.5/720.6 = 54.7% |
| Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 124 | 664.8/720.6 = 92.3% (82.8%, 96.7%) | 709.4/720.6 = 98.5% | 664.8/720.6 = 92.3% (82.8%, 96.7%) |
| Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 124 | 686.3/720.6 = 95.2% (87.8%, 98.2%) | 720.6/720.6 = 100.0% | 701.7/720.6 = 97.4% (89.6%, 99.4%) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 366 | 5625.8/6974.1 = 80.7% (74.8%, 85.4%) | 6371.4/6974.1 = 91.4% | 5816/6974.1 = 83.4% (77.8%, 87.8%) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 366 | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 366 | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 123 | 749.9/793.6 = 94.5% (85.7%, 98.0%) | 758.5/793.6 = 95.6% | 749.9/793.6 = 94.5% (85.7%, 98.0%) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 123 | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 123 | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 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 (BAU/ml) | 124 | 519.5/720.6 = 72.1% (60.8%, 81.1%) | 600.4/720.6 = 83.3% (72.9%, 90.3%) | 529.2/720.6 = 73.4% (62.2%, 82.3%) |
| Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 124 | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 124 | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 185 | 1667.6/2965 = 56.2% (48.7%, 63.5%) | 2263.8/2965 = 76.3% (69.4%, 82.2%) | 1816.7/2965 = 61.3% (53.7%, 68.3%) |
| Age < 65 At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 185 | 2894.8/2965 = 97.6% (93.7%, 99.1%) | 2954.1/2965 = 99.6% (97.4%, 99.9%) | 2894.8/2965 = 97.6% (93.7%, 99.1%) |
| Age < 65 At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 185 | 2914.6/2965 = 98.3% (94.6%, 99.5%) | 2965/2965 = 100.0% (100.0%, 100.0%) | 2945.3/2965 = 99.3% (95.3%, 99.9%) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 198.7/321 = 61.9% (47.9%, 74.1%) | 263.1/321 = 82.0% (68.9%, 90.3%) | 223/321 = 69.5% (55.6%, 80.6%) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 316.4/321 = 98.6% (90.0%, 99.8%) | 321/321 = 100.0% (100.0%, 100.0%) | 316.4/321 = 98.6% (90.0%, 99.8%) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 59 | 164.7/292 = 56.4% (43.2%, 68.8%) | 207.5/292 = 71.0% (57.8%, 81.5%) | 169.1/292 = 57.9% (44.6%, 70.1%) |
| Age < 65 At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 59 | 286.8/292 = 98.2% (87.8%, 99.8%) | 286.8/292 = 98.2% (87.8%, 99.8%) | 286.8/292 = 98.2% (87.8%, 99.8%) |

(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 (BAU/ml) | 59 | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 185 | 2305.4/2965 = 77.8% (70.8%, 83.4%) | 2581.4/2965 = 87.1% (81.0%, 91.4%) | 2419.2/2965 = 81.6% (75.0%, 86.8%) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 185 | 2945.3/2965 = 99.3% (95.3%, 99.9%) | 2965/2965 = 100.0% (100.0%, 100.0%) | 2945.3/2965 = 99.3% (95.3%, 99.9%) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 185 | 2965/2965 = 100.0% (100.0%, 100.0%) | 2965/2965 = 100.0% (100.0%, 100.0%) | 2965/2965 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 309.8/321 = 96.5% (86.2%, 99.2%) | 309.8/321 = 96.5% (86.2%, 99.2%) | 309.8/321 = 96.5% (86.2%, 99.2%) |
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 59 | 241.5/292 = 82.7% (70.3%, 90.6%) | 261.5/292 = 89.6% (78.2%, 95.3%) | 251.9/292 = 86.3% (74.4%, 93.2%) |
| Age < 65 At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 59 | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 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 (BAU/ml) | 59 | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 172 | 3342.8/5804 = 57.6% (49.9%, 64.9%) | 4389.7/5804 = 75.6% (68.5%, 81.6%) | 3576.2/5804 = 61.6% (54.0%, 68.7%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 172 | 5701/5804 = 98.2% (94.5%, 99.4%) | 5804/5804 = 100.0% (100.0%, 100.0%) | 5701/5804 = 98.2% (94.5%, 99.4%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 172 | 5766.2/5804 = 99.3% (95.4%, 99.9%) | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 508.9/662 = 76.9% (63.8%, 86.2%) | 565.2/662 = 85.4% (72.8%, 92.7%) | 526.2/662 = 79.5% (66.4%, 88.4%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 653.4/662 = 98.7% (90.9%, 99.8%) | 662/662 = 100.0% (100.0%, 100.0%) | 653.4/662 = 98.7% (90.9%, 99.8%) |
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 61 | 255.5/601 = 42.5% (30.3%, 55.7%) | 409.8/601 = 68.2% (54.9%, 79.1%) | 296.7/601 = 49.4% (36.5%, 62.3%) |
| Age < 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 61 | 545.2/601 = 90.7% (79.4%, 96.1%) | 589.8/601 = 98.1% (87.3%, 99.8%) | 545.2/601 = 90.7% (79.4%, 96.1%) |

(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 (BAU/ml) | 61 | 566.8/601 = 94.3% (85.3%, 97.9%) | 601/601 = 100.0% (100.0%, 100.0%) | 582.1/601 = 96.9% (87.5%, 99.3%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 172 | 4530.5/5804 = 78.1% (71.0%, 83.8%) | 5234.3/5804 = 90.2% (84.6%, 93.9%) | 4709/5804 = 81.1% (74.4%, 86.4%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 172 | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 172 | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 618.3/662 = 93.4% (82.8%, 97.6%) | 626.9/662 = 94.7% (84.0%, 98.4%) | 618.3/662 = 93.4% (82.8%, 97.6%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 61 | 409.8/601 = 68.2% (54.9%, 79.1%) | 488.6/601 = 81.3% (68.8%, 89.6%) | 417.5/601 = 69.5% (56.2%, 80.1%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 61 | 601/601 = 100.0% (100.0%, 100.0%) | 601/601 = 100.0% (100.0%, 100.0%) | 601/601 = 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 (BAU/ml) | 61 | 601/601 = 100.0% (100.0%, 100.0%) | 601/601 = 100.0% (100.0%, 100.0%) | 601/601 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 936.8/1187.9 = 78.9% (72.5%, 84.1%) | 1104.9/1187.9 = 93.0% (88.3%, 95.9%) | 985.5/1187.9 = 83.0% (76.9%, 87.7%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 55 | 110.4/119.4 = 92.4% (80.8%, 97.3%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 111.8/119.4 = 93.6% (81.7%, 98.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 90.4/112.4 = 80.4% (67.6%, 88.9%) | 100.5/112.4 = 89.4% (78.0%, 95.3%) | 94.4/112.4 = 84.0% (71.7%, 91.6%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 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 (BAU/ml) | 58 | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 1120.7/1187.9 = 94.3% (90.0%, 96.9%) | 1162.5/1187.9 = 97.9% (94.4%, 99.2%) | 1144/1187.9 = 96.3% (92.4%, 98.3%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 102.2/112.4 = 90.9% (79.7%, 96.2%) | 108.4/112.4 = 96.4% (86.2%, 99.1%) | 104.3/112.4 = 92.7% (81.9%, 97.3%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 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 (BAU/ml) | 58 | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 952/1170.1 = 81.4% (75.1%, 86.3%) | 1104.9/1170.1 = 94.4% (90.1%, 96.9%) | 1003.5/1170.1 = 85.8% (79.9%, 90.1%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 65 | 122.6/131.6 = 93.1% (82.5%, 97.5%) | 125.1/131.6 = 95.1% (85.1%, 98.5%) | 125.1/131.6 = 95.1% (85.1%, 98.5%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 91.7/119.6 = 76.7% (64.5%, 85.7%) | 107/119.6 = 89.5% (79.2%, 95.0%) | 97.8/119.6 = 81.8% (70.3%, 89.5%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline 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 (BAU/ml) | 63 | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 1095.3/1170.1 = 93.6% (89.2%, 96.3%) | 1137.2/1170.1 = 97.2% (93.8%, 98.8%) | 1107/1170.1 = 94.6% (90.4%, 97.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 109.7/119.6 = 91.8% (81.4%, 96.6%) | 111.7/119.6 = 93.5% (83.5%, 97.6%) | 111.7/119.6 = 93.5% (83.5%, 97.6%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline 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 (BAU/ml) | 63 | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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



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 (BAU/ml) | 320 | 2969.6/4733.6 = 62.7% (55.7%, 69.3%) | 3704.8/4733.6 = 78.3% (71.6%, 83.7%) | 3137.1/4733.6 = 66.3% (59.3%, 72.6%) |
| Male | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 320 | 4686.4/4733.6 = 99.0% (96.0%, 99.8%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4686.4/4733.6 = 99.0% (96.0%, 99.8%) |
| Male | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 320 | 4665.1/4733.6 = 98.6% (95.0%, 99.6%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4713.8/4733.6 = 99.6% (97.1%, 99.9%) |
| Male | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 95 | 376.7/510.2 = 73.8% (61.1%, 83.5%) | 444.2/510.2 = 87.1% (74.9%, 93.8%) | 401/510.2 = 78.6% (66.0%, 87.4%) |
| Male | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 95 | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 95 | 501.6/510.2 = 98.3% (88.6%, 99.8%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 501.6/510.2 = 98.3% (88.6%, 99.8%) |
| Male | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 108 | 256.4/501.1 = 51.2% (39.3%, 62.9%) | 337.7/501.1 = 67.4% (54.8%, 77.9%) | 285.2/501.1 = 56.9% (44.6%, 68.4%) |
| Male | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 108 | 489.9/501.1 = 97.8% (85.4%, 99.7%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 489.9/501.1 = 97.8% (85.4%, 99.7%) |
| Male | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 108 | 474.5/501.1 = 94.7% (84.5%, 98.3%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 489.9/501.1 = 97.8% (85.4%, 99.7%) |
| Male | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 320 | 3909/4733.6 = 82.6% (76.3%, 87.5%) | 4347.4/4733.6 = 91.8% (86.8%, 95.1%) | 4085.2/4733.6 = 86.3% (80.5%, 90.6%) |
| Male | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 320 | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 320 | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 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 (BAU/ml) | 95 | 481.8/510.2 = 94.4% (83.1%, 98.3%) | 490.4/510.2 = 96.1% (84.4%, 99.1%) | 481.8/510.2 = 94.4% (83.1%, 98.3%) |
| Male | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 95 | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 95 | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/5325.1 = 0% (0.0%, 0.0%) | 0/5325.1 = 0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/5325.1 = 0% (0.0%, 0.0%) | 0/5325.1 = 0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/5325.1 = 0% (0.0%, 0.0%) | 0/5325.1 = 0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 108 | 366.2/501.1 = 73.1% (60.3%, 82.9%) | 418.3/501.1 = 83.5% (71.0%, 91.2%) | 375.5/501.1 = 74.9% (62.1%, 84.5%) |
| Male | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 108 | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 108 | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) |
| Female | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 427 | 3929.7/6393.4 = 61.5% (55.3%, 67.3%) | 5158.5/6393.4 = 80.7% (75.1%, 85.2%) | 4244.9/6393.4 = 66.4% (60.3%, 72.0%) |
| Female | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 427 | 6267.4/6393.4 = 98.0% (95.0%, 99.2%) | 6382.5/6393.4 = 99.8% (98.8%, 100.0%) | 6267.4/6393.4 = 98.0% (95.0%, 99.2%) |
| Female | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 427 | 6373.7/6393.4 = 99.7% (97.8%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) |
| Female | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 139 | 563.9/723.8 = 77.9% (67.7%, 85.6%) | 628.6/723.8 = 86.8% (77.1%, 92.8%) | 585.1/723.8 = 80.8% (70.6%, 88.1%) |
| Female | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 139 | 719.2/723.8 = 99.4% (95.5%, 99.9%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 719.2/723.8 = 99.4% (95.5%, 99.9%) |
| Female | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 139 | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 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 (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 133 | 345.8/623.9 = 55.4% (44.8%, 65.6%) | 487/623.9 = 78.1% (67.7%, 85.8%) | 372.8/623.9 = 59.8% (49.0%, 69.7%) |
| Female | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 133 | 574.1/623.9 = 92.0% (82.1%, 96.7%) | 607.5/623.9 = 97.4% (89.1%, 99.4%) | 574.1/623.9 = 92.0% (82.1%, 96.7%) |
| Female | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 133 | 616.2/623.9 = 98.8% (91.6%, 99.8%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 616.2/623.9 = 98.8% (91.6%, 99.8%) |
| Female | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 427 | 5142.9/6393.4 = 80.4% (74.9%, 85.0%) | 5767.9/6393.4 = 90.2% (85.8%, 93.4%) | 5294/6393.4 = 82.8% (77.4%, 87.1%) |
| Female | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 427 | 6373.7/6393.4 = 99.7% (97.8%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) | 6373.7/6393.4 = 99.7% (97.8%, 100.0%) |
| Female | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 427 | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 139 | 697.3/723.8 = 96.3% (88.2%, 98.9%) | 697.3/723.8 = 96.3% (88.2%, 98.9%) | 697.3/723.8 = 96.3% (88.2%, 98.9%) |
| Female | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 139 | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 139 | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |
| Female | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |
| Female | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 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 |
|--------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| Female | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 133 | 497/623.9 = 79.7% (69.2%, 87.2%) | 552/623.9 = 88.5% (79.3%, 93.9%) | 509.9/623.9 = 81.7% (71.4%, 88.9%) |
| Female | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 133 | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 133 | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 201 | 2824/5028.5 = 56.2% (48.6%, 63.4%) | 3878.6/5028.5 = 77.1% (70.2%, 82.9%) | 3062.4/5028.5 = 60.9% (53.4%, 68.0%) |
| Age < 65 Female | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 201 | 4902.5/5028.5 = 97.5% (93.6%, 99.0%) | 5017.6/5028.5 = 99.8% (98.5%, 100.0%) | 4902.5/5028.5 = 97.5% (93.6%, 99.0%) |
| Age < 65 Female | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 201 | 5008.8/5028.5 = 99.6% (97.2%, 99.9%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 66 | 418.6/573.1 = 73.0% (60.4%, 82.8%) | 481.9/573.1 = 84.1% (71.9%, 91.6%) | 438.3/573.1 = 76.5% (63.8%, 85.7%) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 66 | 568.5/573.1 = 99.2% (94.3%, 99.9%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 568.5/573.1 = 99.2% (94.3%, 99.9%) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 66 | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 70 | 252.1/502.7 = 50.2% (37.6%, 62.7%) | 373.2/502.7 = 74.3% (61.6%, 83.8%) | 270.9/502.7 = 53.9% (41.1%, 66.2%) |
| Age < 65 Female | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 70 | 452.8/502.7 = 90.1% (78.0%, 95.9%) | 486.3/502.7 = 96.7% (86.5%, 99.3%) | 452.8/502.7 = 90.1% (78.0%, 95.9%) |

(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 (BAU/ml) | 70 | 495/502.7 = 98.5% (89.5%, 99.8%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 495/502.7 = 98.5% (89.5%, 99.8%) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 201 | 3854.1/5028.5 = 76.6% (69.7%, 82.4%) | 4440.1/5028.5 = 88.3% (82.7%, 92.2%) | 3991.5/5028.5 = 79.4% (72.6%, 84.9%) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 201 | 5008.8/5028.5 = 99.6% (97.2%, 99.9%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) | 5008.8/5028.5 = 99.6% (97.2%, 99.9%) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 201 | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 66 | 546.6/573.1 = 95.4% (85.1%, 98.7%) | 546.6/573.1 = 95.4% (85.1%, 98.7%) | 546.6/573.1 = 95.4% (85.1%, 98.7%) |
| Age < 65 Female | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 66 | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 66 | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 70 | 385.6/502.7 = 76.7% (63.9%, 86.0%) | 440.6/502.7 = 87.7% (76.1%, 94.1%) | 398.5/502.7 = 79.3% (66.6%, 88.0%) |
| Age < 65 Female | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 70 | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 502.7/502.7 = 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 (BAU/ml) | 70 | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 156 | 2186.4/3740.5 = 58.5% (49.8%, 66.6%) | 2774.9/3740.5 = 74.2% (65.9%, 81.0%) | 2330.6/3740.5 = 62.3% (53.7%, 70.2%) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 156 | 3693.3/3740.5 = 98.7% (94.9%, 99.7%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3693.3/3740.5 = 98.7% (94.9%, 99.7%) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 156 | 3672/3740.5 = 98.2% (93.7%, 99.5%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3720.7/3740.5 = 99.5% (96.3%, 99.9%) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 48 | 289/409.9 = 70.5% (54.9%, 82.5%) | 346.5/409.9 = 84.5% (69.5%, 92.9%) | 310.9/409.9 = 75.8% (60.3%, 86.6%) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 48 | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 48 | 401.3/409.9 = 97.9% (85.7%, 99.7%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 401.3/409.9 = 97.9% (85.7%, 99.7%) |
| Age < 65 Male | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 50 | 168.1/390.3 = 43.1% (29.0%, 58.4%) | 244/390.3 = 62.5% (46.8%, 75.9%) | 194.8/390.3 = 49.9% (35.0%, 64.8%) |
| Age < 65 Male | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 50 | 379.2/390.3 = 97.1% (81.3%, 99.6%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 379.2/390.3 = 97.1% (81.3%, 99.6%) |
| Age < 65 Male | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 50 | 363.8/390.3 = 93.2% (80.1%, 97.9%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 379.2/390.3 = 97.1% (81.3%, 99.6%) |
| Age < 65 Male | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 156 | 2981.8/3740.5 = 79.7% (71.9%, 85.8%) | 3375.6/3740.5 = 90.2% (83.8%, 94.3%) | 3136.7/3740.5 = 83.9% (76.5%, 89.2%) |
| Age < 65 Male | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 156 | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 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 (BAU/ml) | 156 | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 48 | 381.5/409.9 = 93.1% (79.0%, 98.0%) | 390.1/409.9 = 95.2% (80.7%, 98.9%) | 381.5/409.9 = 93.1% (79.0%, 98.0%) |
| Age < 65 Male | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 48 | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 48 | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 50 | 265.7/390.3 = 68.1% (52.1%, 80.7%) | 309.6/390.3 = 79.3% (63.7%, 89.3%) | 270.9/390.3 = 69.4% (53.4%, 81.8%) |
| Age < 65 Male | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 50 | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 50 | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 226 | 1105.7/1364.9 = 81.0% (75.2%, 85.7%) | 1279.9/1364.9 = 93.8% (89.5%, 96.4%) | 1182.5/1364.9 = 86.6% (81.4%, 90.6%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 226 | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 226 | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 73 | 145.3/150.7 = 96.4% (88.8%, 98.9%) | 146.8/150.7 = 97.4% (89.3%, 99.4%) | 146.8/150.7 = 97.4% (89.3%, 99.4%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % Greater than 2 × LLOQ | % Greater than 4 × LLOQ |
|-----------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 93.8/121.3 = 77.3% (65.0%, 86.2%) | 113.8/121.3 = 93.8% (84.3%, 97.7%) | 101.9/121.3 = 84.0% (72.4%, 91.3%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 226 | 1288.8/1364.9 = 94.4% (90.4%, 96.8%) | 1327.9/1364.9 = 97.3% (94.0%, 98.8%) | 1302.5/1364.9 = 95.4% (91.6%, 97.5%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 226 | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 226 | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % Greater than 2 × LLOQ | % Greater than 4 × LLOQ |
|-----------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 111.4/121.3 = 91.9% (81.6%, 96.7%) | 111.4/121.3 = 91.9% (81.6%, 96.7%) | 111.4/121.3 = 91.9% (81.6%, 96.7%) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 164 | 783.2/993.1 = 78.9% (71.9%, 84.5%) | 930/993.1 = 93.6% (88.7%, 96.5%) | 806.5/993.1 = 81.2% (74.4%, 86.5%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 164 | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 164 | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 47 | 87.6/100.3 = 87.4% (72.7%, 94.8%) | 97.7/100.3 = 97.5% (83.3%, 99.7%) | 90.2/100.3 = 89.9% (75.6%, 96.3%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 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 Male | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 88.3/110.7 = 79.8% (67.2%, 88.3%) | 93.8/110.7 = 84.7% (72.6%, 92.0%) | 90.4/110.7 = 81.6% (69.3%, 89.7%) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 164 | 927.2/993.1 = 93.4% (88.5%, 96.2%) | 971.8/993.1 = 97.9% (94.3%, 99.2%) | 948.5/993.1 = 95.5% (91.1%, 97.8%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 164 | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 164 | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 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 |
|---------------|--------|---------|---------------------|-------------------------|----|--|--|--|
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 100.5/110.7 = 90.8% (79.5%, 96.2%) | 108.7/110.7 = 98.2% (87.6%, 99.8%) | 104.6/110.7 = 94.5% (83.9%, 98.2%) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 99 | 715.5/1009.2 = 70.9% (58.3%, 80.9%) | 845.6/1009.2 = 83.8% (71.3%, 91.5%) | 729.9/1009.2 = 72.3% (59.7%, 82.2%) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 99 | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 99 | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 31 | 57.3/105.1 = 54.5% (32.0%, 75.3%) | 89.8/105.1 = 85.4% (64.1%, 95.1%) | 63.3/105.1 = 60.3% (36.5%, 80.0%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 31 | 100.5/105.1 = 95.6% (72.3%, 99.5%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 100.5/105.1 = 95.6% (72.3%, 99.5%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 31 | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 34 | 64.3/148.4 = 43.3% (25.2%, 63.4%) | 113.2/148.4 = 76.3% (54.2%, 89.7%) | 72/148.4 = 48.5% (29.1%, 68.3%) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 34 | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 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 |
|--------------------|--------|---------|---------------------|-------------------------|----|--|--|--|
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 34 | 140.7/148.4 = 94.8% (68.8%, 99.3%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 99 | 819.5/1009.2 = 81.2% (68.1%, 89.7%) | 911.9/1009.2 = 90.4% (78.6%, 96.0%) | 830.5/1009.2 = 82.3% (69.2%, 90.6%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 99 | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 99 | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 31 | 91.9/105.1 = 87.4% (58.2%, 97.2%) | 91.9/105.1 = 87.4% (58.2%, 97.2%) | 91.9/105.1 = 87.4% (58.2%, 97.2%) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 31 | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 31 | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 34 | 120.9/148.4 = 81.5% (58.3%, 93.3%) | 136.3/148.4 = 91.9% (69.9%, 98.2%) | 128.6/148.4 = 86.7% (63.8%, 96.0%) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 34 | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 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 |
|------------------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 34 | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 623 | 6012.3/9866.2 = 60.9% (56.0%, 65.7%) | 7809.2/9866.2 = 79.2% (74.6%, 83.0%) | 6448.3/9866.2 = 65.4% (60.4%, 70.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 623 | 9693/9866.2 = 98.2% (96.2%, 99.2%) | 9855.2/9866.2 = 99.9% (99.2%, 100.0%) | 9693/9866.2 = 98.2% (96.2%, 99.2%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 623 | 9778/9866.2 = 99.1% (97.4%, 99.7%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) | 9846.4/9866.2 = 99.8% (98.6%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 194 | 864.6/1101.6 = 78.5% (70.3%, 84.9%) | 955.8/1101.6 = 86.8% (78.9%, 92.0%) | 904.1/1101.6 = 82.1% (74.0%, 88.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 194 | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 194 | 1093/1101.6 = 99.2% (94.6%, 99.9%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1093/1101.6 = 99.2% (94.6%, 99.9%) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 201 | 526.9/949.1 = 55.5% (46.8%, 63.9%) | 700.5/949.1 = 73.8% (65.1%, 81.0%) | 574.9/949.1 = 60.6% (51.7%, 68.8%) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 201 | 888.1/949.1 = 93.6% (86.3%, 97.1%) | 932.7/949.1 = 98.3% (92.6%, 99.6%) | 888.1/949.1 = 93.6% (86.3%, 97.1%) |

(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 (BAU/ml) | 201 | 922.5/949.1 = 97.2% (91.5%, 99.1%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 930.2/949.1 = 98.0% (92.1%, 99.5%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 623 | 8023.8/9866.2 = 81.3% (77.0%, 85.0%) | 8951.7/9866.2 = 90.7% (87.3%, 93.3%) | 8301.9/9866.2 = 84.1% (80.0%, 87.6%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 623 | 9846.4/9866.2 = 99.8% (98.6%, 100.0%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) | 9846.4/9866.2 = 99.8% (98.6%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 623 | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 194 | 1059.9/1101.6 = 96.2% (89.9%, 98.6%) | 1068.5/1101.6 = 97.0% (90.6%, 99.1%) | 1059.9/1101.6 = 96.2% (89.9%, 98.6%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 194 | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 194 | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 201 | 722.4/949.1 = 76.1% (67.4%, 83.1%) | 814.1/949.1 = 85.8% (77.8%, 91.2%) | 737/949.1 = 77.6% (69.0%, 84.4%) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 201 | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 949.1/949.1 = 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 |
|--------------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 201 | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 25 | 171.5/251.7 = 68.1% (38.0%, 88.2%) | 208.5/251.7 = 82.9% (50.2%, 95.9%) | 203.7/251.7 = 80.9% (49.8%, 94.8%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 25 | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 25 | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 9 | 18.7/27.3 = 68.4% (12.9%, 97.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 18.7/27.3 = 68.4% (12.9%, 97.0%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 6 | 11.1/27.5 = 40.3% (3.1%, 93.3%) | 11.1/27.5 = 40.3% (3.1%, 93.3%) | 11.1/27.5 = 40.3% (3.1%, 93.3%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 6 | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 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 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 6 | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 25 | 208.5/251.7 = 82.9% (50.2%, 95.9%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 246.8/251.7 = 98.1% (85.7%, 99.8%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 25 | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 25 | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 6 | 19.8/27.5 = 72.0% (6.5%, 99.0%) | 19.8/27.5 = 72.0% (6.5%, 99.0%) | 19.8/27.5 = 72.0% (6.5%, 99.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 6 | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 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 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 6 | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 370 | 3671.4/6391.7 = 57.4% (51.0%, 63.6%) | 4873/6391.7 = 76.2% (70.1%, 81.4%) | 4015.5/6391.7 = 62.8% (56.4%, 68.8%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 6276.7/6391.7 = 98.2% (95.1%, 99.4%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6276.7/6391.7 = 98.2% (95.1%, 99.4%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 6314.5/6391.7 = 98.8% (96.1%, 99.6%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6372/6391.7 = 99.7% (97.8%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 569.8/723.7 = 78.7% (67.6%, 86.8%) | 619.4/723.7 = 85.6% (74.6%, 92.3%) | 585.4/723.7 = 80.9% (69.7%, 88.6%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 339/609.5 = 55.6% (44.3%, 66.4%) | 432.7/609.5 = 71.0% (59.3%, 80.4%) | 360.3/609.5 = 59.1% (47.6%, 69.7%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 553.7/609.5 = 90.8% (80.0%, 96.1%) | 598.3/609.5 = 98.2% (87.8%, 99.8%) | 553.7/609.5 = 90.8% (80.0%, 96.1%) |

(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 (BAU/ml) | 121 | 598.3/609.5 = 98.2% (87.8%, 99.8%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 598.3/609.5 = 98.2% (87.8%, 99.8%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 5052.5/6391.7 = 79.0% (73.1%, 84.0%) | 5723/6391.7 = 89.5% (84.7%, 93.0%) | 5219/6391.7 = 81.7% (75.9%, 86.3%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 6372/6391.7 = 99.7% (97.8%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6372/6391.7 = 99.7% (97.8%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 690.6/723.7 = 95.4% (86.0%, 98.6%) | 690.6/723.7 = 95.4% (86.0%, 98.6%) | 690.6/723.7 = 95.4% (86.0%, 98.6%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 455.4/609.5 = 74.7% (63.2%, 83.6%) | 518.7/609.5 = 85.1% (74.3%, 91.9%) | 464.8/609.5 = 76.3% (64.6%, 84.9%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 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 (BAU/ml) | 121 | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 184 | 1460.2/2208.2 = 66.1% (56.8%, 74.3%) | 1873.4/2208.2 = 84.8% (76.9%, 90.4%) | 1567.8/2208.2 = 71.0% (61.9%, 78.7%) |
| Black or African American | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 184 | 2169.9/2208.2 = 98.3% (92.4%, 99.6%) | 2197.3/2208.2 = 99.5% (96.5%, 99.9%) | 2169.9/2208.2 = 98.3% (92.4%, 99.6%) |
| Black or African American | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 184 | 2197.3/2208.2 = 99.5% (96.5%, 99.9%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 189.8/246.7 = 76.9% (59.3%, 88.4%) | 220.3/246.7 = 89.3% (73.1%, 96.2%) | 198.4/246.7 = 80.4% (63.1%, 90.8%) |
| Black or African American | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 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 |
|---------------------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| Black or African American | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 45 | 106.3/163.1 = 65.2% (46.0%, 80.5%) | 121.8/163.1 = 74.7% (55.0%, 87.7%) | 106.3/163.1 = 65.2% (46.0%, 80.5%) |
| Black or African American | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 45 | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 45 | 147.7/163.1 = 90.6% (68.6%, 97.7%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 155.4/163.1 = 95.3% (71.7%, 99.4%) |
| Black or African American | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 184 | 1896/2208.2 = 85.9% (78.2%, 91.1%) | 2029.5/2208.2 = 91.9% (84.9%, 95.8%) | 1970.6/2208.2 = 89.2% (81.9%, 93.8%) |
| Black or African American | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 184 | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 184 | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 238.1/246.7 = 96.5% (77.9%, 99.5%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 238.1/246.7 = 96.5% (77.9%, 99.5%) |
| Black or African American | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 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 (BAU/ml) | 58 | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 45 | 126.2/163.1 = 77.4% (56.8%, 89.9%) | 146/163.1 = 89.5% (68.7%, 97.1%) | 133.9/163.1 = 82.1% (61.5%, 93.0%) |
| Black or African American | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 45 | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 45 | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 56 | 675.8/943.6 = 71.6% (54.7%, 84.1%) | 838.1/943.6 = 88.8% (73.5%, 95.8%) | 682.7/943.6 = 72.4% (55.3%, 84.7%) |
| Asian | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 56 | 923.8/943.6 = 97.9% (85.9%, 99.7%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 923.8/943.6 = 97.9% (85.9%, 99.7%) |
| Asian | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 56 | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 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 |
|-------|--------|---------|---------------------|-------------------------|----|--|--|--|
| Asian | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 19 | 89.3/122.1 = 73.1% (46.3%, 89.6%) | 102.4/122.1 = 83.9% (56.8%, 95.4%) | 95.9/122.1 = 78.5% (51.5%, 92.6%) |
| Asian | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 27 | 60.4/140.4 = 43.0% (22.4%, 66.3%) | 97.2/140.4 = 69.2% (43.3%, 86.9%) | 82.7/140.4 = 58.9% (35.1%, 79.1%) |
| Asian | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 27 | 135.2/140.4 = 96.3% (75.3%, 99.5%) | 135.2/140.4 = 96.3% (75.3%, 99.5%) | 135.2/140.4 = 96.3% (75.3%, 99.5%) |
| Asian | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 27 | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 56 | 832/943.6 = 88.2% (72.3%, 95.5%) | 916.1/943.6 = 97.1% (81.4%, 99.6%) | 896.4/943.6 = 95.0% (81.3%, 98.8%) |
| Asian | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 56 | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 56 | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 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 |
|----------------------------------|--------|---------|---------------------|-------------------------|----|--|--|--|
| Asian | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 27 | 100.4/140.4 = 71.5% (45.2%, 88.4%) | 105.6/140.4 = 75.2% (48.1%, 90.9%) | 105.6/140.4 = 75.2% (48.1%, 90.9%) |
| Asian | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 27 | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 27 | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 87.8/185.7 = 47.2% (18.5%, 77.9%) | 120/185.7 = 64.6% (27.9%, 89.6%) | 92.6/185.7 = 49.8% (19.9%, 79.9%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 32.2/42.3 = 76.2% (23.7%, 97.1%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 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 |
|----------------------------------|--------|---------|---------------------|-------------------------|----|--|--|--|
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 33.7/42.3 = 79.6% (22.4%, 98.1%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 33.7/42.3 = 79.6% (22.4%, 98.1%) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 7 | 13.8/31.9 = 43.2% (6.3%, 89.5%) | 30.2/31.9 = 94.7% (46.4%, 99.7%) | 18.1/31.9 = 56.8% (10.5%, 93.7%) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 7 | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 7 | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 120/185.7 = 64.6% (27.9%, 89.6%) | 158.3/185.7 = 85.2% (36.9%, 98.3%) | 130.9/185.7 = 70.5% (30.2%, 92.9%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 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 (BAU/ml) | 16 | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 7 | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 7 | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 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 |
|---|--------|---------|---------------------|-------------------------|----|--|--|--|
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 7 | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 17 | 105.6/186.3 = 56.7% (26.3%, 82.8%) | 132.2/186.3 = 71.0% (35.8%, 91.5%) | 110.4/186.3 = 59.2% (28.1%, 84.4%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 17 | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 17 | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 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 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 17 | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 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 |
|---|--------|---------|---------------------|-------------------------|----|--|--|--|
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 17 | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 17 | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 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 (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Multiracial | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 57 | 608.5/725.5 = 83.9% (70.5%, 91.9%) | 658.5/725.5 = 90.8% (76.9%, 96.7%) | 608.5/725.5 = 83.9% (70.5%, 91.9%) |
| Multiracial | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 57 | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 57 | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 20.7/40.5 = 51.1% (13.8%, 87.2%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 20.7/40.5 = 51.1% (13.8%, 87.2%) |
| Multiracial | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 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 (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 16 | 20.3/48.2 = 42.2% (17.5%, 71.5%) | 35.7/48.2 = 74.1% (41.3%, 92.1%) | 20.3/48.2 = 42.2% (17.5%, 71.5%) |
| Multiracial | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 16 | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 16 | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 57 | 601/725.5 = 82.8% (64.9%, 92.6%) | 683.9/725.5 = 94.3% (82.4%, 98.3%) | 601/725.5 = 82.8% (64.9%, 92.6%) |
| Multiracial | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 57 | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 57 | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 31.9/40.5 = 78.7% (19.4%, 98.3%) | 31.9/40.5 = 78.7% (19.4%, 98.3%) | 31.9/40.5 = 78.7% (19.4%, 98.3%) |
| Multiracial | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 16 | 43.8/48.2 = 90.9% (50.2%, 99.0%) | 43.8/48.2 = 90.9% (50.2%, 99.0%) | 43.8/48.2 = 90.9% (50.2%, 99.0%) |

(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 (BAU/ml) | 16 | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 16 | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 141.2/203.6 = 69.4% (28.5%, 92.8%) | 146/203.6 = 71.7% (29.0%, 94.0%) | 141.2/203.6 = 69.4% (28.5%, 92.8%) |
| Other | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 7 | 20.1/24.7 = 81.3% (10.5%, 99.4%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 20.1/24.7 = 81.3% (10.5%, 99.4%) |
| Other | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 13 | 42/72.9 = 57.6% (22.1%, 86.7%) | 65.2/72.9 = 89.4% (40.7%, 99.1%) | 42/72.9 = 57.6% (22.1%, 86.7%) |
| Other | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 13 | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 13 | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 183.8/203.6 = 90.3% (47.3%, 99.0%) | 183.8/203.6 = 90.3% (47.3%, 99.0%) | 183.8/203.6 = 90.3% (47.3%, 99.0%) |
| Other | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 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 |
|--------------------------|--------|---------|---------------------|-------------------------|----|--|--|--|
| Other | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 13 | 54.1/72.9 = 74.1% (29.8%, 95.1%) | 65.2/72.9 = 89.4% (40.7%, 99.1%) | 54.1/72.9 = 74.1% (29.8%, 95.1%) |
| Other | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 13 | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 13 | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 4 | 14.4/25.4 = 56.9% (0.9%, 99.5%) | 14.4/25.4 = 56.9% (0.9%, 99.5%) | 14.4/25.4 = 56.9% (0.9%, 99.5%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 4 | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 4 | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 0/15.4 = 0.0% | 7.7/15.4 = 50.0% | 0/15.4 = 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 | Positive | Anti RBD IgG (BAU/ml) | 2 | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 4 | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 4 | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 4 | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 7.7/15.4 = 50.0% | 15.4/15.4 = 100.0% | 7.7/15.4 = 50.0% |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 377 | 3227.9/4735.3 = 68.2% (61.8%, 73.9%) | 3990.3/4735.3 = 84.3% (78.8%, 88.5%) | 3366.4/4735.3 = 71.1% (64.8%, 76.6%) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 377 | 4677.2/4735.3 = 98.8% (96.0%, 99.6%) | 4724.3/4735.3 = 99.8% (98.4%, 100.0%) | 4677.2/4735.3 = 98.8% (96.0%, 99.6%) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 377 | 4724.3/4735.3 = 99.8% (98.4%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 116 | 370.8/510.3 = 72.7% (61.4%, 81.6%) | 453.5/510.3 = 88.9% (79.6%, 94.2%) | 400.6/510.3 = 78.5% (67.7%, 86.4%) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 116 | 505.7/510.3 = 99.1% (93.7%, 99.9%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 505.7/510.3 = 99.1% (93.7%, 99.9%) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 116 | 501.7/510.3 = 98.3% (88.6%, 99.8%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 501.7/510.3 = 98.3% (88.6%, 99.8%) |
| Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 263.3/515.5 = 51.1% (40.2%, 61.9%) | 392.1/515.5 = 76.1% (65.1%, 84.4%) | 297.7/515.5 = 57.7% (46.6%, 68.2%) |
| Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 510.3/515.5 = 99.0% (93.0%, 99.9%) | 510.3/515.5 = 99.0% (93.0%, 99.9%) | 510.3/515.5 = 99.0% (93.0%, 99.9%) |

(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 (BAU/ml) | 120 | 492.5/515.5 = 95.5% (87.1%, 98.5%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 507.8/515.5 = 98.5% (89.8%, 99.8%) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 377 | 3999.4/4735.3 = 84.5% (79.0%, 88.7%) | 4392.4/4735.3 = 92.8% (88.6%, 95.5%) | 4160.2/4735.3 = 87.9% (82.8%, 91.6%) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 377 | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 377 | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 116 | 488.5/510.3 = 95.7% (86.9%, 98.7%) | 497.1/510.3 = 97.4% (89.3%, 99.4%) | 488.5/510.3 = 95.7% (86.9%, 98.7%) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 116 | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 116 | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 407.7/515.5 = 79.1% (67.7%, 87.2%) | 451.6/515.5 = 87.6% (77.1%, 93.7%) | 420.7/515.5 = 81.6% (70.3%, 89.3%) |
| Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 515.5/515.5 = 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 (BAU/ml) | 120 | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 3671.4/6391.7 = 57.4% (51.0%, 63.6%) | 4873/6391.7 = 76.2% (70.1%, 81.4%) | 4015.5/6391.7 = 62.8% (56.4%, 68.8%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 6276.7/6391.7 = 98.2% (95.1%, 99.4%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6276.7/6391.7 = 98.2% (95.1%, 99.4%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 6314.5/6391.7 = 98.8% (96.1%, 99.6%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6372/6391.7 = 99.7% (97.8%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 569.8/723.7 = 78.7% (67.6%, 86.8%) | 619.4/723.7 = 85.6% (74.6%, 92.3%) | 585.4/723.7 = 80.9% (69.7%, 88.6%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 339/609.5 = 55.6% (44.3%, 66.4%) | 432.7/609.5 = 71.0% (59.3%, 80.4%) | 360.3/609.5 = 59.1% (47.6%, 69.7%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 553.7/609.5 = 90.8% (80.0%, 96.1%) | 598.3/609.5 = 98.2% (87.8%, 99.8%) | 553.7/609.5 = 90.8% (80.0%, 96.1%) |

(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 (BAU/ml) | 121 | 598.3/609.5 = 98.2% (87.8%, 99.8%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 598.3/609.5 = 98.2% (87.8%, 99.8%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 5052.5/6391.7 = 79.0% (73.1%, 84.0%) | 5723/6391.7 = 89.5% (84.7%, 93.0%) | 5219/6391.7 = 81.7% (75.9%, 86.3%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 6372/6391.7 = 99.7% (97.8%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6372/6391.7 = 99.7% (97.8%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 690.6/723.7 = 95.4% (86.0%, 98.6%) | 690.6/723.7 = 95.4% (86.0%, 98.6%) | 690.6/723.7 = 95.4% (86.0%, 98.6%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 455.4/609.5 = 74.7% (63.2%, 83.6%) | 518.7/609.5 = 85.1% (74.3%, 91.9%) | 464.8/609.5 = 76.3% (64.6%, 84.9%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 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 (BAU/ml) | 121 | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 181 | 2421.6/3706.5 = 65.3% (57.4%, 72.5%) | 3027.5/3706.5 = 81.7% (74.8%, 87.0%) | 2514.8/3706.5 = 67.8% (60.0%, 74.8%) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 181 | 3648.4/3706.5 = 98.4% (94.9%, 99.5%) | 3695.6/3706.5 = 99.7% (97.9%, 100.0%) | 3648.4/3706.5 = 98.4% (94.9%, 99.5%) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 181 | 3695.6/3706.5 = 99.7% (97.9%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 60 | 284.5/421.1 = 67.6% (54.1%, 78.6%) | 365.7/421.1 = 86.8% (75.7%, 93.3%) | 312.9/421.1 = 74.3% (61.3%, 84.0%) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 60 | 416.5/421.1 = 98.9% (92.2%, 99.9%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 416.5/421.1 = 98.9% (92.2%, 99.9%) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 60 | 412.5/421.1 = 98.0% (86.1%, 99.7%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 412.5/421.1 = 98.0% (86.1%, 99.7%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 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 (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 62 | 181.1/412 = 44.0% (31.2%, 57.5%) | 300.7/412 = 73.0% (59.5%, 83.3%) | 215.5/412 = 52.3% (38.9%, 65.4%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 62 | 406.7/412 = 98.7% (91.2%, 99.8%) | 406.7/412 = 98.7% (91.2%, 99.8%) | 406.7/412 = 98.7% (91.2%, 99.8%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 62 | 388.9/412 = 94.4% (83.8%, 98.2%) | 412/412 = 100.0% (100.0%, 100.0%) | 404.3/412 = 98.1% (87.2%, 99.8%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 181 | 3037.2/3706.5 = 81.9% (75.1%, 87.2%) | 3387.7/3706.5 = 91.4% (86.0%, 94.8%) | 3176.8/3706.5 = 85.7% (79.3%, 90.4%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 181 | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 181 | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 60 | 399.2/421.1 = 94.8% (84.1%, 98.4%) | 407.9/421.1 = 96.9% (87.0%, 99.3%) | 399.2/421.1 = 94.8% (84.1%, 98.4%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 60 | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 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 |
|-------------------------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| Age < 65 Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 60 | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 62 | 307.9/412 = 74.7% (60.9%, 84.9%) | 351.7/412 = 85.4% (72.3%, 92.9%) | 320.8/412 = 77.9% (64.0%, 87.4%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 62 | 412/412 = 100.0% (100.0%, 100.0%) | 412/412 = 100.0% (100.0%, 100.0%) | 412/412 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 62 | 412/412 = 100.0% (100.0%, 100.0%) | 412/412 = 100.0% (100.0%, 100.0%) | 412/412 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 176 | 2588.8/5062.5 = 51.1% (43.3%, 58.9%) | 3626/5062.5 = 71.6% (64.0%, 78.2%) | 2878.1/5062.5 = 56.9% (49.0%, 64.4%) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 176 | 4947.5/5062.5 = 97.7% (93.8%, 99.2%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 4947.5/5062.5 = 97.7% (93.8%, 99.2%) |

(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 (BAU/ml) | 176 | 4985.2/5062.5 = 98.5% (95.0%, 99.5%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 5042.8/5062.5 = 99.6% (97.2%, 99.9%) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 54 | 423.2/561.9 = 75.3% (61.1%, 85.6%) | 462.7/561.9 = 82.3% (68.3%, 91.0%) | 436.3/561.9 = 77.6% (63.3%, 87.5%) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 54 | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 54 | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 239.1/481 = 49.7% (36.1%, 63.4%) | 316.5/481 = 65.8% (51.4%, 77.8%) | 250.3/481 = 52.0% (38.2%, 65.6%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 425.2/481 = 88.4% (74.8%, 95.1%) | 469.9/481 = 97.7% (84.5%, 99.7%) | 425.2/481 = 88.4% (74.8%, 95.1%) |

(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 (BAU/ml) | 58 | 469.9/481 = 97.7% (84.5%, 99.7%) | 481/481 = 100.0% (100.0%, 100.0%) | 469.9/481 = 97.7% (84.5%, 99.7%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 176 | 3798.6/5062.5 = 75.0% (67.6%, 81.2%) | 4428/5062.5 = 87.5% (81.4%, 91.7%) | 3951.4/5062.5 = 78.1% (70.9%, 83.9%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 176 | 5042.8/5062.5 = 99.6% (97.2%, 99.9%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 5042.8/5062.5 = 99.6% (97.2%, 99.9%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 176 | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 54 | 528.8/561.9 = 94.1% (82.0%, 98.3%) | 528.8/561.9 = 94.1% (82.0%, 98.3%) | 528.8/561.9 = 94.1% (82.0%, 98.3%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 54 | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 54 | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 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 |
|-------------------------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 343.3/481 = 71.4% (56.9%, 82.5%) | 398.4/481 = 82.8% (69.1%, 91.2%) | 348.6/481 = 72.5% (58.0%, 83.4%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 481/481 = 100.0% (100.0%, 100.0%) | 481/481 = 100.0% (100.0%, 100.0%) | 481/481 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 481/481 = 100.0% (100.0%, 100.0%) | 481/481 = 100.0% (100.0%, 100.0%) | 481/481 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 806.3/1028.8 = 78.4% (71.9%, 83.7%) | 962.9/1028.8 = 93.6% (88.9%, 96.4%) | 851.6/1028.8 = 82.8% (76.6%, 87.6%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 86.3/89.2 = 96.8% (87.6%, 99.2%) | 87.8/89.2 = 98.4% (88.9%, 99.8%) | 87.8/89.2 = 98.4% (88.9%, 99.8%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 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 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 82.2/103.6 = 79.3% (66.6%, 88.1%) | 91.4/103.6 = 88.2% (76.8%, 94.4%) | 82.2/103.6 = 79.3% (66.6%, 88.1%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 962.1/1028.8 = 93.5% (89.1%, 96.2%) | 1004.7/1028.8 = 97.7% (94.5%, 99.0%) | 983.4/1028.8 = 95.6% (91.7%, 97.7%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 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 |
|----------------------------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 99.8/103.6 = 96.4% (86.2%, 99.1%) | 99.8/103.6 = 96.4% (86.2%, 99.1%) | 99.8/103.6 = 96.4% (86.2%, 99.1%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 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 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 1082.6/1329.2 = 81.4% (75.3%, 86.3%) | 1247/1329.2 = 93.8% (89.4%, 96.5%) | 1137.4/1329.2 = 85.6% (79.8%, 89.9%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 64 | 146.6/161.8 = 90.6% (80.3%, 95.8%) | 156.7/161.8 = 96.9% (88.0%, 99.2%) | 149.1/161.8 = 92.2% (82.2%, 96.8%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 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 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 99.9/128.4 = 77.8% (65.6%, 86.5%) | 116.2/128.4 = 90.5% (80.1%, 95.7%) | 110.1/128.4 = 85.7% (74.5%, 92.5%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 1253.9/1329.2 = 94.3% (90.0%, 96.8%) | 1295/1329.2 = 97.4% (93.9%, 98.9%) | 1267.6/1329.2 = 95.4% (91.3%, 97.6%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline 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 (BAU/ml) | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 112.1/128.4 = 87.3% (76.3%, 93.6%) | 120.3/128.4 = 93.7% (84.0%, 97.7%) | 116.2/128.4 = 90.5% (80.1%, 95.7%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

2.5 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 (BAU/ml) | 747 | 6899.3/11127 = 62.0% (57.4%, 66.4%) | 9824.7/11127 = 88.3% (84.8%, 91.1%) | 8863.3/11127 = 79.7% (75.5%, 83.2%) |
| | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 747 | 10953.9/11127 = 98.4% (96.6%, 99.3%) | 11127/11127 = 100.0% (100.0%, 100.0%) | 11116.1/11127 = 99.9% (99.3%, 100.0%) |
| | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 747 | 11038.8/11127 = 99.2% (97.7%, 99.7%) | 11127/11127 = 100.0% (100.0%, 100.0%) | 11127/11127 = 100.0% (100.0%, 100.0%) |
| | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 234 | 940.6/1234 = 76.2% (68.6%, 82.5%) | 1169.9/1234 = 94.8% (89.3%, 97.5%) | 1072.9/1234 = 86.9% (79.9%, 91.8%) |
| | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 234 | 1229.4/1234 = 99.6% (97.4%, 99.9%) | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) |
| | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 234 | 1225.4/1234 = 99.3% (95.1%, 99.9%) | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) |
| | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 241 | 602.3/1125 = 53.5% (45.7%, 61.2%) | 897.8/1125 = 79.8% (72.1%, 85.8%) | 824.8/1125 = 73.3% (65.5%, 79.9%) |
| | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 241 | 1064/1125 = 94.6% (88.4%, 97.6%) | 1125/1125 = 100.0% (100.0%, 100.0%) | 1108.6/1125 = 98.5% (93.8%, 99.7%) |
| | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 241 | 1090.8/1125 = 97.0% (92.1%, 98.9%) | 1125/1125 = 100.0% (100.0%, 100.0%) | 1125/1125 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 747 | 9051.8/11127 = 81.4% (77.3%, 84.8%) | 10551.3/11127 = 94.8% (92.2%, 96.6%) | 10115.3/11127 = 90.9% (87.8%, 93.3%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 747 | 11107.3/11127 = 99.8% (98.7%, 100.0%) | 11127/11127 = 100.0% (100.0%, 100.0%) | 11127/11127 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 747 | 11127/11127 = 100.0% (100.0%, 100.0%) | 11127/11127 = 100.0% (100.0%, 100.0%) | 11127/11127 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 234 | 1179.1/1234 = 95.5% (89.9%, 98.1%) | 1216.1/1234 = 98.6% (93.4%, 99.7%) | 1187.7/1234 = 96.2% (90.7%, 98.5%) |
| | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 241 | 863.2/1125 = 76.7% (68.9%, 83.0%) | 1023.8/1125 = 91.0% (84.5%, 94.9%) | 970.3/1125 = 86.2% (79.2%, 91.2%) |
| | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 1125/1125 = 100.0% (100.0%, 100.0%) | 1125/1125 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 1125/1125 = 100.0% (100.0%, 100.0%) | 1125/1125 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 357 | 5010.4/8769 = 57.1% (51.5%, 62.6%) | 7544.9/8769 = 86.0% (81.6%, 89.6%) | 6653.5/8769 = 75.9% (70.7%, 80.4%) |
| Age < 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 357 | 8595.9/8769 = 98.0% (95.7%, 99.1%) | 8769/8769 = 100.0% (100.0%, 100.0%) | 8758.1/8769 = 99.9% (99.1%, 100.0%) |
| Age < 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 357 | 8680.8/8769 = 99.0% (97.1%, 99.7%) | 8769/8769 = 100.0% (100.0%, 100.0%) | 8769/8769 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 114 | 707.6/983 = 72.0% (62.6%, 79.8%) | 918.9/983 = 93.5% (86.6%, 96.9%) | 828.4/983 = 84.3% (75.5%, 90.3%) |
| Age < 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 114 | 978.4/983 = 99.5% (96.7%, 99.9%) | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 114 | 974.4/983 = 99.1% (93.9%, 99.9%) | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 72 | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) |
| Age < 65 | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 72 | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) |
| Age < 65 | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 72 | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) |
| Age < 65 | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 420.2/893 = 47.1% (37.6%, 56.7%) | 675.3/893 = 75.6% (66.1%, 83.2%) | 617.2/893 = 69.1% (59.4%, 77.4%) |
| Age < 65 | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 832/893 = 93.2% (85.5%, 96.9%) | 893/893 = 100.0% (100.0%, 100.0%) | 876.6/893 = 98.2% (92.2%, 99.6%) |
| Age < 65 | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 858.8/893 = 96.2% (90.1%, 98.6%) | 893/893 = 100.0% (100.0%, 100.0%) | 893/893 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 357 | 6835.8/8769 = 78.0% (72.9%, 82.3%) | 8211.8/8769 = 93.6% (90.3%, 95.9%) | 7815.7/8769 = 89.1% (85.2%, 92.1%) |
| Age < 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 357 | 8749.3/8769 = 99.8% (98.4%, 100.0%) | 8769/8769 = 100.0% (100.0%, 100.0%) | 8769/8769 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 357 | 8769/8769 = 100.0% (100.0%, 100.0%) | 8769/8769 = 100.0% (100.0%, 100.0%) | 8769/8769 = 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 (BAU/ml) | 114 | 928.1/983 = 94.4% (87.4%, 97.6%) | 965.1/983 = 98.2% (91.7%, 99.6%) | 936.7/983 = 95.3% (88.3%, 98.2%) |
| Age < 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 114 | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 114 | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 72 | 0/8343 = 0% (0.0%, 0.0%) | 0/8343 = 0% (0.0%, 0.0%) | 0/8343 = 0% (0.0%, 0.0%) |
| Age < 65 | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 72 | 0/8343 = 0% (0.0%, 0.0%) | 0/8343 = 0% (0.0%, 0.0%) | 0/8343 = 0% (0.0%, 0.0%) |
| Age < 65 | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 72 | 0/8343 = 0% (0.0%, 0.0%) | 0/8343 = 0% (0.0%, 0.0%) | 0/8343 = 0% (0.0%, 0.0%) |
| Age < 65 | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 651.2/893 = 72.9% (63.3%, 80.8%) | 795.8/893 = 89.1% (80.9%, 94.1%) | 750.2/893 = 84.0% (75.2%, 90.1%) |
| Age < 65 | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 893/893 = 100.0% (100.0%, 100.0%) | 893/893 = 100.0% (100.0%, 100.0%) | 893/893 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 893/893 = 100.0% (100.0%, 100.0%) | 893/893 = 100.0% (100.0%, 100.0%) | 893/893 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 390 | 1888.8/2358 = 80.1% (75.8%, 83.8%) | 2279.9/2358 = 96.7% (94.2%, 98.1%) | 2209.9/2358 = 93.7% (90.7%, 95.8%) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 390 | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 390 | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 120 | 233/251 = 92.8% (86.0%, 96.4%) | 251/251 = 100.0% (100.0%, 100.0%) | 244.5/251 = 97.4% (91.9%, 99.2%) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 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 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 182.1/232 = 78.5% (70.1%, 85.0%) | 222.5/232 = 95.9% (90.4%, 98.3%) | 207.5/232 = 89.5% (82.5%, 93.8%) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 390 | 2216/2358 = 94.0% (91.1%, 96.0%) | 2339.5/2358 = 99.2% (97.5%, 99.8%) | 2299.7/2358 = 97.5% (95.4%, 98.7%) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 390 | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 390 | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 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 (BAU/ml) | 121 | 212/232 = 91.4% (84.6%, 95.3%) | 227.9/232 = 98.2% (93.1%, 99.6%) | 220.1/232 = 94.9% (89.0%, 97.7%) |
| Age \geq 65 | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 381 | 2604.4/4152.9 = 62.7% (57.0%, 68.1%) | 3715.2/4152.9 = 89.5% (85.1%, 92.7%) | 3368.7/4152.9 = 81.1% (76.0%, 85.4%) |
| At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 381 | 4082.7/4152.9 = 98.3% (95.5%, 99.4%) | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) | 4142/4152.9 = 99.7% (98.1%, 100.0%) |
| At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 381 | 4102.5/4152.9 = 98.8% (96.2%, 99.6%) | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 111 | 309.1/440.4 = 70.2% (59.4%, 79.1%) | 411.5/440.4 = 93.4% (84.8%, 97.3%) | 382.5/440.4 = 86.9% (77.1%, 92.9%) |
| At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 111 | 435.8/440.4 = 98.9% (92.7%, 99.9%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 111 | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 71 | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 71 | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 71 | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 117 | 255.1/404.4 = 63.1% (52.8%, 72.3%) | 353.4/404.4 = 87.4% (78.5%, 92.9%) | 308/404.4 = 76.2% (66.1%, 83.9%) |
| At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 117 | 399.2/404.4 = 98.7% (91.1%, 99.8%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 399.2/404.4 = 98.7% (91.1%, 99.8%) |
| At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 117 | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 381 | 3426/4152.9 = 82.5% (77.4%, 86.6%) | 3935.5/4152.9 = 94.8% (91.0%, 97.0%) | 3743.9/4152.9 = 90.2% (85.8%, 93.3%) |
| At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 381 | 4133.1/4152.9 = 99.5% (96.7%, 99.9%) | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 381 | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) | 4152.9/4152.9 = 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 (BAU/ml) | 111 | 429.2/440.4 = 97.5% (89.9%, 99.4%) | 435.8/440.4 = 98.9% (92.7%, 99.9%) | 429.2/440.4 = 97.5% (89.9%, 99.4%) |
| At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 111 | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 111 | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 71 | 0/4237.6 = 0% (0.0%, 0.0%) | 0/4237.6 = 0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 71 | 0/4237.6 = 0% (0.0%, 0.0%) | 0/4237.6 = 0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 71 | 0/4237.6 = 0% (0.0%, 0.0%) | 0/4237.6 = 0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 117 | 343.7/404.4 = 85.0% (75.9%, 91.1%) | 389.6/404.4 = 96.3% (89.0%, 98.8%) | 369.9/404.4 = 91.5% (83.3%, 95.8%) |
| At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 117 | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 117 | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 366 | 4294.9/6974.1 = 61.6% (55.1%, 67.7%) | 6109.6/6974.1 = 87.6% (82.3%, 91.5%) | 5494.6/6974.1 = 78.8% (72.8%, 83.8%) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 366 | 6871.1/6974.1 = 98.5% (95.4%, 99.5%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 366 | 6936.3/6974.1 = 99.5% (96.2%, 99.9%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 123 | 631.5/793.6 = 79.6% (68.6%, 87.4%) | 758.5/793.6 = 95.6% (86.7%, 98.6%) | 690.3/793.6 = 87.0% (76.6%, 93.2%) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 123 | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 123 | 785/793.6 = 98.9% (92.5%, 99.9%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 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 (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 124 | 347.2/720.6 = 48.2% (37.5%, 59.0%) | 544.5/720.6 = 75.6% (64.4%, 84.1%) | 516.8/720.6 = 71.7% (60.5%, 80.8%) |
| Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 124 | 664.8/720.6 = 92.3% (82.8%, 96.7%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 709.4/720.6 = 98.5% (89.5%, 99.8%) |
| Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 124 | 686.3/720.6 = 95.2% (87.8%, 98.2%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 366 | 5625.8/6974.1 = 80.7% (74.8%, 85.4%) | 6615.7/6974.1 = 94.9% (90.8%, 97.2%) | 6371.4/6974.1 = 91.4% (86.7%, 94.5%) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 366 | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 366 | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 123 | 749.9/793.6 = 94.5% (85.7%, 98.0%) | 780.3/793.6 = 98.3% (88.7%, 99.8%) | 758.5/793.6 = 95.6% (86.7%, 98.6%) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 123 | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 123 | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 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 (BAU/ml) | 124 | 519.5/720.6 = 72.1% (60.8%, 81.1%) | 634.1/720.6 = 88.0% (78.1%, 93.8%) | 600.4/720.6 = 83.3% (72.9%, 90.3%) |
| Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 124 | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 124 | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 185 | 1667.6/2965 = 56.2% (48.7%, 63.5%) | 2568.4/2965 = 86.6% (80.6%, 91.0%) | 2263.8/2965 = 76.3% (69.4%, 82.2%) |
| Age < 65 At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 185 | 2894.8/2965 = 97.6% (93.7%, 99.1%) | 2965/2965 = 100.0% (100.0%, 100.0%) | 2954.1/2965 = 99.6% (97.4%, 99.9%) |
| Age < 65 At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 185 | 2914.6/2965 = 98.3% (94.6%, 99.5%) | 2965/2965 = 100.0% (100.0%, 100.0%) | 2965/2965 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 198.7/321 = 61.9% (47.9%, 74.1%) | 292.1/321 = 91.0% (79.3%, 96.4%) | 263.1/321 = 82.0% (68.9%, 90.3%) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 316.4/321 = 98.6% (90.0%, 99.8%) | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 59 | 164.7/292 = 56.4% (43.2%, 68.8%) | 246.7/292 = 84.5% (72.3%, 91.9%) | 207.5/292 = 71.0% (57.8%, 81.5%) |
| Age < 65 At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 59 | 286.8/292 = 98.2% (87.8%, 99.8%) | 292/292 = 100.0% (100.0%, 100.0%) | 286.8/292 = 98.2% (87.8%, 99.8%) |

(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 (BAU/ml) | 59 | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 185 | 2305.4/2965 = 77.8% (70.8%, 83.4%) | 2754.5/2965 = 92.9% (87.7%, 96.0%) | 2581.4/2965 = 87.1% (81.0%, 91.4%) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 185 | 2945.3/2965 = 99.3% (95.3%, 99.9%) | 2965/2965 = 100.0% (100.0%, 100.0%) | 2965/2965 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 185 | 2965/2965 = 100.0% (100.0%, 100.0%) | 2965/2965 = 100.0% (100.0%, 100.0%) | 2965/2965 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 309.8/321 = 96.5% (86.2%, 99.2%) | 316.4/321 = 98.6% (90.0%, 99.8%) | 309.8/321 = 96.5% (86.2%, 99.2%) |
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 59 | 241.5/292 = 82.7% (70.3%, 90.6%) | 277.2/292 = 94.9% (84.8%, 98.4%) | 261.5/292 = 89.6% (78.2%, 95.3%) |
| Age < 65 At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 59 | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 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 (BAU/ml) | 59 | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 172 | 3342.8/5804 = 57.6% (49.9%, 64.9%) | 4976.5/5804 = 85.7% (79.4%, 90.3%) | 4389.7/5804 = 75.6% (68.5%, 81.6%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 172 | 5701/5804 = 98.2% (94.5%, 99.4%) | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 172 | 5766.2/5804 = 99.3% (95.4%, 99.9%) | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 508.9/662 = 76.9% (63.8%, 86.2%) | 626.9/662 = 94.7% (84.0%, 98.4%) | 565.2/662 = 85.4% (72.8%, 92.7%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 653.4/662 = 98.7% (90.9%, 99.8%) | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 61 | 255.5/601 = 42.5% (30.3%, 55.7%) | 428.6/601 = 71.3% (58.1%, 81.7%) | 409.8/601 = 68.2% (54.9%, 79.1%) |
| Age < 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 61 | 545.2/601 = 90.7% (79.4%, 96.1%) | 601/601 = 100.0% (100.0%, 100.0%) | 589.8/601 = 98.1% (87.3%, 99.8%) |

(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 (BAU/ml) | 61 | 566.8/601 = 94.3% (85.3%, 97.9%) | 601/601 = 100.0% (100.0%, 100.0%) | 601/601 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 172 | 4530.5/5804 = 78.1% (71.0%, 83.8%) | 5457.3/5804 = 94.0% (89.1%, 96.8%) | 5234.3/5804 = 90.2% (84.6%, 93.9%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 172 | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 172 | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 618.3/662 = 93.4% (82.8%, 97.6%) | 648.7/662 = 98.0% (86.4%, 99.7%) | 626.9/662 = 94.7% (84.0%, 98.4%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 61 | 409.8/601 = 68.2% (54.9%, 79.1%) | 518.7/601 = 86.3% (74.4%, 93.2%) | 488.6/601 = 81.3% (68.8%, 89.6%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 61 | 601/601 = 100.0% (100.0%, 100.0%) | 601/601 = 100.0% (100.0%, 100.0%) | 601/601 = 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 (BAU/ml) | 61 | 601/601 = 100.0% (100.0%, 100.0%) | 601/601 = 100.0% (100.0%, 100.0%) | 601/601 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 936.8/1187.9 = 78.9% (72.5%, 84.1%) | 1146.8/1187.9 = 96.5% (92.5%, 98.4%) | 1104.9/1187.9 = 93.0% (88.3%, 95.9%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 55 | 110.4/119.4 = 92.4% (80.8%, 97.3%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 90.4/112.4 = 80.4% (67.6%, 88.9%) | 106.7/112.4 = 94.9% (84.8%, 98.4%) | 100.5/112.4 = 89.4% (78.0%, 95.3%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 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 (BAU/ml) | 58 | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 1120.7/1187.9 = 94.3% (90.0%, 96.9%) | 1181/1187.9 = 99.4% (96.0%, 99.9%) | 1162.5/1187.9 = 97.9% (94.4%, 99.2%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 102.2/112.4 = 90.9% (79.7%, 96.2%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 108.4/112.4 = 96.4% (86.2%, 99.1%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 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 (BAU/ml) | 58 | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 952/1170.1 = 81.4% (75.1%, 86.3%) | 1133.1/1170.1 = 96.8% (93.0%, 98.6%) | 1104.9/1170.1 = 94.4% (90.1%, 96.9%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 65 | 122.6/131.6 = 93.1% (82.5%, 97.5%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 125.1/131.6 = 95.1% (85.1%, 98.5%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 91.7/119.6 = 76.7% (64.5%, 85.7%) | 115.8/119.6 = 96.9% (87.9%, 99.2%) | 107/119.6 = 89.5% (79.2%, 95.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 1095.3/1170.1 = 93.6% (89.2%, 96.3%) | 1158.4/1170.1 = 99.0% (96.0%, 99.8%) | 1137.2/1170.1 = 97.2% (93.8%, 98.8%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 109.7/119.6 = 91.8% (81.4%, 96.6%) | 115.5/119.6 = 96.6% (87.0%, 99.2%) | 111.7/119.6 = 93.5% (83.5%, 97.6%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline 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 (BAU/ml) | 63 | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 320 | 2969.6/4733.6 = 62.7% (55.7%, 69.3%) | 4140.5/4733.6 = 87.5% (81.7%, 91.6%) | 3704.8/4733.6 = 78.3% (71.6%, 83.7%) |
| Male | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 320 | 4686.4/4733.6 = 99.0% (96.0%, 99.8%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 320 | 4665.1/4733.6 = 98.6% (95.0%, 99.6%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 95 | 376.7/510.2 = 73.8% (61.1%, 83.5%) | 475.2/510.2 = 93.1% (82.1%, 97.6%) | 444.2/510.2 = 87.1% (74.9%, 93.8%) |
| Male | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 95 | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 95 | 501.6/510.2 = 98.3% (88.6%, 99.8%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 108 | 256.4/501.1 = 51.2% (39.3%, 62.9%) | 374.4/501.1 = 74.7% (61.9%, 84.3%) | 337.7/501.1 = 67.4% (54.8%, 77.9%) |
| Male | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 108 | 489.9/501.1 = 97.8% (85.4%, 99.7%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 108 | 474.5/501.1 = 94.7% (84.5%, 98.3%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 320 | 3909/4733.6 = 82.6% (76.3%, 87.5%) | 4521.1/4733.6 = 95.5% (90.8%, 97.9%) | 4347.4/4733.6 = 91.8% (86.8%, 95.1%) |
| Male | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 320 | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 320 | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 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 (BAU/ml) | 95 | 481.8/510.2 = 94.4% (83.1%, 98.3%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 490.4/510.2 = 96.1% (84.4%, 99.1%) |
| Male | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 95 | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 95 | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 108 | 366.2/501.1 = 73.1% (60.3%, 82.9%) | 442.3/501.1 = 88.3% (76.2%, 94.6%) | 418.3/501.1 = 83.5% (71.0%, 91.2%) |
| Male | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 108 | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 108 | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) |
| Female | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 427 | 3929.7/6393.4 = 61.5% (55.3%, 67.3%) | 5684.3/6393.4 = 88.9% (84.0%, 92.4%) | 5158.5/6393.4 = 80.7% (75.1%, 85.2%) |
| Female | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 427 | 6267.4/6393.4 = 98.0% (95.0%, 99.2%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) | 6382.5/6393.4 = 99.8% (98.8%, 100.0%) |
| Female | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 427 | 6373.7/6393.4 = 99.7% (97.8%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) |
| Female | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 139 | 563.9/723.8 = 77.9% (67.7%, 85.6%) | 694.7/723.8 = 96.0% (88.5%, 98.7%) | 628.6/723.8 = 86.8% (77.1%, 92.8%) |
| Female | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 139 | 719.2/723.8 = 99.4% (95.5%, 99.9%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) |
| Female | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 139 | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 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 (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 133 | 345.8/623.9 = 55.4% (44.8%, 65.6%) | 523.4/623.9 = 83.9% (73.6%, 90.7%) | 487/623.9 = 78.1% (67.7%, 85.8%) |
| Female | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 133 | 574.1/623.9 = 92.0% (82.1%, 96.7%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 607.5/623.9 = 97.4% (89.1%, 99.4%) |
| Female | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 133 | 616.2/623.9 = 98.8% (91.6%, 99.8%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 427 | 5142.9/6393.4 = 80.4% (74.9%, 85.0%) | 6030.2/6393.4 = 94.3% (90.6%, 96.6%) | 5767.9/6393.4 = 90.2% (85.8%, 93.4%) |
| Female | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 427 | 6373.7/6393.4 = 99.7% (97.8%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 427 | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 139 | 697.3/723.8 = 96.3% (88.2%, 98.9%) | 705.9/723.8 = 97.5% (89.0%, 99.5%) | 697.3/723.8 = 96.3% (88.2%, 98.9%) |
| Female | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 139 | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 139 | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |
| Female | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |
| Female | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 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 (BAU/ml) | 133 | 497/623.9 = 79.7% (69.2%, 87.2%) | 581.4/623.9 = 93.2% (84.4%, 97.2%) | 552/623.9 = 88.5% (79.3%, 93.9%) |
| Female | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 133 | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 133 | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 201 | 2824/5028.5 = 56.2% (48.6%, 63.4%) | 4367.3/5028.5 = 86.9% (80.7%, 91.3%) | 3878.6/5028.5 = 77.1% (70.2%, 82.9%) |
| Age < 65 Female | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 201 | 4902.5/5028.5 = 97.5% (93.6%, 99.0%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) | 5017.6/5028.5 = 99.8% (98.5%, 100.0%) |
| Age < 65 Female | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 201 | 5008.8/5028.5 = 99.6% (97.2%, 99.9%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 66 | 418.6/573.1 = 73.0% (60.4%, 82.8%) | 544/573.1 = 94.9% (85.5%, 98.3%) | 481.9/573.1 = 84.1% (71.9%, 91.6%) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 66 | 568.5/573.1 = 99.2% (94.3%, 99.9%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 66 | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 70 | 252.1/502.7 = 50.2% (37.6%, 62.7%) | 406.2/502.7 = 80.8% (68.2%, 89.2%) | 373.2/502.7 = 74.3% (61.6%, 83.8%) |
| Age < 65 Female | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 70 | 452.8/502.7 = 90.1% (78.0%, 95.9%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 486.3/502.7 = 96.7% (86.5%, 99.3%) |

(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 (BAU/ml) | 70 | 495/502.7 = 98.5% (89.5%, 99.8%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 201 | 3854.1/5028.5 = 76.6% (69.7%, 82.4%) | 4679/5028.5 = 93.0% (88.3%, 96.0%) | 4440.1/5028.5 = 88.3% (82.7%, 92.2%) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 201 | 5008.8/5028.5 = 99.6% (97.2%, 99.9%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 201 | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 66 | 546.6/573.1 = 95.4% (85.1%, 98.7%) | 555.2/573.1 = 96.9% (86.2%, 99.4%) | 546.6/573.1 = 95.4% (85.1%, 98.7%) |
| Age < 65 Female | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 66 | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 66 | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 70 | 385.6/502.7 = 76.7% (63.9%, 86.0%) | 462.2/502.7 = 92.0% (81.0%, 96.8%) | 440.6/502.7 = 87.7% (76.1%, 94.1%) |
| Age < 65 Female | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 70 | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 502.7/502.7 = 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 Female | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 70 | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 156 | 2186.4/3740.5 = 58.5% (49.8%, 66.6%) | 3177.5/3740.5 = 84.9% (77.7%, 90.2%) | 2774.9/3740.5 = 74.2% (65.9%, 81.0%) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 156 | 3693.3/3740.5 = 98.7% (94.9%, 99.7%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 156 | 3672/3740.5 = 98.2% (93.7%, 99.5%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 48 | 289/409.9 = 70.5% (54.9%, 82.5%) | 374.9/409.9 = 91.5% (77.8%, 97.0%) | 346.5/409.9 = 84.5% (69.5%, 92.9%) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 48 | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 48 | 401.3/409.9 = 97.9% (85.7%, 99.7%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 50 | 168.1/390.3 = 43.1% (29.0%, 58.4%) | 269.1/390.3 = 68.9% (53.1%, 81.3%) | 244/390.3 = 62.5% (46.8%, 75.9%) |
| Age < 65 Male | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 50 | 379.2/390.3 = 97.1% (81.3%, 99.6%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 50 | 363.8/390.3 = 93.2% (80.1%, 97.9%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 156 | 2981.8/3740.5 = 79.7% (71.9%, 85.8%) | 3532.8/3740.5 = 94.4% (88.5%, 97.4%) | 3375.6/3740.5 = 90.2% (83.8%, 94.3%) |
| Age < 65 Male | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 156 | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 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 (BAU/ml) | 156 | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 48 | 381.5/409.9 = 93.1% (79.0%, 98.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 390.1/409.9 = 95.2% (80.7%, 98.9%) |
| Age < 65 Male | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 48 | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 48 | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 50 | 265.7/390.3 = 68.1% (52.1%, 80.7%) | 333.7/390.3 = 85.5% (70.1%, 93.6%) | 309.6/390.3 = 79.3% (63.7%, 89.3%) |
| Age < 65 Male | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 50 | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 50 | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 226 | 1105.7/1364.9 = 81.0% (75.2%, 85.7%) | 1316.9/1364.9 = 96.5% (92.8%, 98.3%) | 1279.9/1364.9 = 93.8% (89.5%, 96.4%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 226 | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 226 | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 73 | 145.3/150.7 = 96.4% (88.8%, 98.9%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 146.8/150.7 = 97.4% (89.3%, 99.4%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-----------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 93.8/121.3 = 77.3% (65.0%, 86.2%) | 117.2/121.3 = 96.6% (87.2%, 99.2%) | 113.8/121.3 = 93.8% (84.3%, 97.7%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 226 | 1288.8/1364.9 = 94.4% (90.4%, 96.8%) | 1351.2/1364.9 = 99.0% (96.0%, 99.8%) | 1327.9/1364.9 = 97.3% (94.0%, 98.8%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 226 | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 226 | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-----------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 111.4/121.3 = 91.9% (81.6%, 96.7%) | 119.2/121.3 = 98.3% (88.6%, 99.8%) | 111.4/121.3 = 91.9% (81.6%, 96.7%) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 164 | 783.2/993.1 = 78.9% (71.9%, 84.5%) | 962.9/993.1 = 97.0% (92.8%, 98.8%) | 930/993.1 = 93.6% (88.7%, 96.5%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 164 | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 164 | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 47 | 87.6/100.3 = 87.4% (72.7%, 94.8%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 97.7/100.3 = 97.5% (83.3%, 99.7%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 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 Male | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 88.3/110.7 = 79.8% (67.2%, 88.3%) | 105.3/110.7 = 95.1% (85.4%, 98.5%) | 93.8/110.7 = 84.7% (72.6%, 92.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 164 | 927.2/993.1 = 93.4% (88.5%, 96.2%) | 988.3/993.1 = 99.5% (96.6%, 99.9%) | 971.8/993.1 = 97.9% (94.3%, 99.2%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 164 | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 164 | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------|--------|---------|---------------------|-------------------------|----|--|--|--|
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 100.5/110.7 = 90.8% (79.5%, 96.2%) | 108.7/110.7 = 98.2% (87.6%, 99.8%) | 108.7/110.7 = 98.2% (87.6%, 99.8%) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 99 | 715.5/1009.2 = 70.9% (58.3%, 80.9%) | 861.4/1009.2 = 85.4% (72.7%, 92.7%) | 845.6/1009.2 = 83.8% (71.3%, 91.5%) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 99 | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 99 | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 31 | 57.3/105.1 = 54.5% (32.0%, 75.3%) | 95.9/105.1 = 91.2% (69.3%, 97.9%) | 89.8/105.1 = 85.4% (64.1%, 95.1%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 31 | 100.5/105.1 = 95.6% (72.3%, 99.5%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 31 | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 34 | 64.3/148.4 = 43.3% (25.2%, 63.4%) | 128.6/148.4 = 86.7% (63.8%, 96.0%) | 113.2/148.4 = 76.3% (54.2%, 89.7%) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 34 | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 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 (BAU/ml) | 34 | 140.7/148.4 = 94.8% (68.8%, 99.3%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 99 | 819.5/1009.2 = 81.2% (68.1%, 89.7%) | 970.8/1009.2 = 96.2% (84.2%, 99.2%) | 911.9/1009.2 = 90.4% (78.6%, 96.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 99 | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 99 | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 31 | 91.9/105.1 = 87.4% (58.2%, 97.2%) | 100.5/105.1 = 95.6% (72.3%, 99.5%) | 91.9/105.1 = 87.4% (58.2%, 97.2%) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 31 | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 31 | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 34 | 120.9/148.4 = 81.5% (58.3%, 93.3%) | 136.3/148.4 = 91.9% (69.9%, 98.2%) | 136.3/148.4 = 91.9% (69.9%, 98.2%) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 34 | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 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 (BAU/ml) | 34 | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 623 | 6012.3/9866.2 = 60.9% (56.0%, 65.7%) | 8722.6/9866.2 = 88.4% (84.6%, 91.4%) | 7809.2/9866.2 = 79.2% (74.6%, 83.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 623 | 9693/9866.2 = 98.2% (96.2%, 99.2%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) | 9855.2/9866.2 = 99.9% (99.2%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 623 | 9778/9866.2 = 99.1% (97.4%, 99.7%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 194 | 864.6/1101.6 = 78.5% (70.3%, 84.9%) | 1046.8/1101.6 = 95.0% (88.8%, 97.9%) | 955.8/1101.6 = 86.8% (78.9%, 92.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 194 | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 194 | 1093/1101.6 = 99.2% (94.6%, 99.9%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 201 | 526.9/949.1 = 55.5% (46.8%, 63.9%) | 749.3/949.1 = 79.0% (70.3%, 85.6%) | 700.5/949.1 = 73.8% (65.1%, 81.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 201 | 888.1/949.1 = 93.6% (86.3%, 97.1%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 932.7/949.1 = 98.3% (92.6%, 99.6%) |

(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 (BAU/ml) | 201 | 922.5/949.1 = 97.2% (91.5%, 99.1%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 623 | 8023.8/9866.2 = 81.3% (77.0%, 85.0%) | 9328.8/9866.2 = 94.6% (91.6%, 96.5%) | 8951.7/9866.2 = 90.7% (87.3%, 93.3%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 623 | 9846.4/9866.2 = 99.8% (98.6%, 100.0%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 623 | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 194 | 1059.9/1101.6 = 96.2% (89.9%, 98.6%) | 1088.3/1101.6 = 98.8% (91.8%, 99.8%) | 1068.5/1101.6 = 97.0% (90.6%, 99.1%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 194 | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 194 | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 201 | 722.4/949.1 = 76.1% (67.4%, 83.1%) | 867.6/949.1 = 91.4% (84.0%, 95.6%) | 814.1/949.1 = 85.8% (77.8%, 91.2%) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 201 | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 949.1/949.1 = 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 (BAU/ml) | 201 | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 25 | 171.5/251.7 = 68.1% (38.0%, 88.2%) | 240.7/251.7 = 95.7% (72.0%, 99.5%) | 208.5/251.7 = 82.9% (50.2%, 95.9%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 25 | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 25 | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 9 | 18.7/27.3 = 68.4% (12.9%, 97.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 6 | 11.1/27.5 = 40.3% (3.1%, 93.3%) | 19.8/27.5 = 72.0% (6.5%, 99.0%) | 11.1/27.5 = 40.3% (3.1%, 93.3%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 6 | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 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 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 6 | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 25 | 208.5/251.7 = 82.9% (50.2%, 95.9%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 25 | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 25 | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 6 | 19.8/27.5 = 72.0% (6.5%, 99.0%) | 19.8/27.5 = 72.0% (6.5%, 99.0%) | 19.8/27.5 = 72.0% (6.5%, 99.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 6 | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 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 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 6 | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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



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 (BAU/ml) | 370 | 3671.4/6391.7 = 57.4% (51.0%, 63.6%) | 5426.8/6391.7 = 84.9% (79.4%, 89.2%) | 4873/6391.7 = 76.2% (70.1%, 81.4%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 6276.7/6391.7 = 98.2% (95.1%, 99.4%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 6314.5/6391.7 = 98.8% (96.1%, 99.6%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 569.8/723.7 = 78.7% (67.6%, 86.8%) | 684/723.7 = 94.5% (85.4%, 98.1%) | 619.4/723.7 = 85.6% (74.6%, 92.3%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 339/609.5 = 55.6% (44.3%, 66.4%) | 467.7/609.5 = 76.7% (65.0%, 85.4%) | 432.7/609.5 = 71.0% (59.3%, 80.4%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 553.7/609.5 = 90.8% (80.0%, 96.1%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 598.3/609.5 = 98.2% (87.8%, 99.8%) |

(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 (BAU/ml) | 121 | 598.3/609.5 = 98.2% (87.8%, 99.8%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 5052.5/6391.7 = 79.0% (73.1%, 84.0%) | 5955.6/6391.7 = 93.2% (88.9%, 95.9%) | 5723/6391.7 = 89.5% (84.7%, 93.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 6372/6391.7 = 99.7% (97.8%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 690.6/723.7 = 95.4% (86.0%, 98.6%) | 710.4/723.7 = 98.2% (87.7%, 99.8%) | 690.6/723.7 = 95.4% (86.0%, 98.6%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 455.4/609.5 = 74.7% (63.2%, 83.6%) | 555.5/609.5 = 91.2% (81.0%, 96.1%) | 518.7/609.5 = 85.1% (74.3%, 91.9%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 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 (BAU/ml) | 121 | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 184 | 1460.2/2208.2 = 66.1% (56.8%, 74.3%) | 2127.5/2208.2 = 96.3% (91.5%, 98.5%) | 1873.4/2208.2 = 84.8% (76.9%, 90.4%) |
| Black or African American | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 184 | 2169.9/2208.2 = 98.3% (92.4%, 99.6%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2197.3/2208.2 = 99.5% (96.5%, 99.9%) |
| Black or African American | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 184 | 2197.3/2208.2 = 99.5% (96.5%, 99.9%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 189.8/246.7 = 76.9% (59.3%, 88.4%) | 238.1/246.7 = 96.5% (77.9%, 99.5%) | 220.3/246.7 = 89.3% (73.1%, 96.2%) |
| Black or African American | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 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 (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 45 | 106.3/163.1 = 65.2% (46.0%, 80.5%) | 132.2/163.1 = 81.1% (60.8%, 92.2%) | 121.8/163.1 = 74.7% (55.0%, 87.7%) |
| Black or African American | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 45 | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 45 | 147.7/163.1 = 90.6% (68.6%, 97.7%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 184 | 1896/2208.2 = 85.9% (78.2%, 91.1%) | 2126.7/2208.2 = 96.3% (90.2%, 98.7%) | 2029.5/2208.2 = 91.9% (84.9%, 95.8%) |
| Black or African American | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 184 | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 184 | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 238.1/246.7 = 96.5% (77.9%, 99.5%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 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 (BAU/ml) | 58 | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 45 | 126.2/163.1 = 77.4% (56.8%, 89.9%) | 155.4/163.1 = 95.3% (71.7%, 99.4%) | 146/163.1 = 89.5% (68.7%, 97.1%) |
| Black or African American | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 45 | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 45 | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 56 | 675.8/943.6 = 71.6% (54.7%, 84.1%) | 844.9/943.6 = 89.5% (73.8%, 96.3%) | 838.1/943.6 = 88.8% (73.5%, 95.8%) |
| Asian | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 56 | 923.8/943.6 = 97.9% (85.9%, 99.7%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 56 | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 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 (BAU/ml) | 19 | 89.3/122.1 = 73.1% (46.3%, 89.6%) | 115.6/122.1 = 94.6% (65.5%, 99.4%) | 102.4/122.1 = 83.9% (56.8%, 95.4%) |
| Asian | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 27 | 60.4/140.4 = 43.0% (22.4%, 66.3%) | 107.7/140.4 = 76.7% (48.9%, 91.9%) | 97.2/140.4 = 69.2% (43.3%, 86.9%) |
| Asian | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 27 | 135.2/140.4 = 96.3% (75.3%, 99.5%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 135.2/140.4 = 96.3% (75.3%, 99.5%) |
| Asian | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 27 | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 56 | 832/943.6 = 88.2% (72.3%, 95.5%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 916.1/943.6 = 97.1% (81.4%, 99.6%) |
| Asian | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 56 | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 56 | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 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 (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 27 | 100.4/140.4 = 71.5% (45.2%, 88.4%) | 112.9/140.4 = 80.4% (51.2%, 94.1%) | 105.6/140.4 = 75.2% (48.1%, 90.9%) |
| Asian | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 27 | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 27 | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 87.8/185.7 = 47.2% (18.5%, 77.9%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 120/185.7 = 64.6% (27.9%, 89.6%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 32.2/42.3 = 76.2% (23.7%, 97.1%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 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 (BAU/ml) | 10 | 33.7/42.3 = 79.6% (22.4%, 98.1%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 7 | 13.8/31.9 = 43.2% (6.3%, 89.5%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 30.2/31.9 = 94.7% (46.4%, 99.7%) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 7 | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 7 | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 120/185.7 = 64.6% (27.9%, 89.6%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 158.3/185.7 = 85.2% (36.9%, 98.3%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 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 (BAU/ml) | 16 | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 7 | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 7 | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 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 (BAU/ml) | 7 | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 17 | 105.6/186.3 = 56.7% (26.3%, 82.8%) | 164.4/186.3 = 88.3% (58.7%, 97.6%) | 132.2/186.3 = 71.0% (35.8%, 91.5%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 17 | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 17 | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 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 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 17 | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 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 (BAU/ml) | 17 | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 17 | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 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 (BAU/ml) | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti RBD IgG* (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Multiracial | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 57 | 608.5/725.5 = 83.9% (70.5%, 91.9%) | 658.5/725.5 = 90.8% (76.9%, 96.7%) | 658.5/725.5 = 90.8% (76.9%, 96.7%) |
| Multiracial | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 57 | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 57 | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 20.7/40.5 = 51.1% (13.8%, 87.2%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 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 (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 16 | 20.3/48.2 = 42.2% (17.5%, 71.5%) | 41.8/48.2 = 86.7% (51.9%, 97.5%) | 35.7/48.2 = 74.1% (41.3%, 92.1%) |
| Multiracial | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 16 | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 16 | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 57 | 601/725.5 = 82.8% (64.9%, 92.6%) | 705.8/725.5 = 97.3% (82.3%, 99.6%) | 683.9/725.5 = 94.3% (82.4%, 98.3%) |
| Multiracial | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 57 | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 57 | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 31.9/40.5 = 78.7% (19.4%, 98.3%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 31.9/40.5 = 78.7% (19.4%, 98.3%) |
| Multiracial | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 16 | 43.8/48.2 = 90.9% (50.2%, 99.0%) | 43.8/48.2 = 90.9% (50.2%, 99.0%) | 43.8/48.2 = 90.9% (50.2%, 99.0%) |

(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 (BAU/ml) | 16 | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 16 | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 141.2/203.6 = 69.4% (28.5%, 92.8%) | 183.8/203.6 = 90.3% (47.3%, 99.0%) | 146/203.6 = 71.7% (29.0%, 94.0%) |
| Other | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 7 | 20.1/24.7 = 81.3% (10.5%, 99.4%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 13 | 42/72.9 = 57.6% (22.1%, 86.7%) | 65.2/72.9 = 89.4% (40.7%, 99.1%) | 65.2/72.9 = 89.4% (40.7%, 99.1%) |
| Other | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 13 | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 13 | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 183.8/203.6 = 90.3% (47.3%, 99.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 183.8/203.6 = 90.3% (47.3%, 99.0%) |
| Other | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 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 (BAU/ml) | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 13 | 54.1/72.9 = 74.1% (29.8%, 95.1%) | 65.2/72.9 = 89.4% (40.7%, 99.1%) | 65.2/72.9 = 89.4% (40.7%, 99.1%) |
| Other | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 13 | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 13 | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 4 | 14.4/25.4 = 56.9% (0.9%, 99.5%) | 14.4/25.4 = 56.9% (0.9%, 99.5%) | 14.4/25.4 = 56.9% (0.9%, 99.5%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 4 | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 4 | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 0/15.4 = 0.0% | 15.4/15.4 = 100.0% | 7.7/15.4 = 50.0% |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------------|--------|---------|---------------------|-------------------------|---|--|--|--|
| Not reported and unknown | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 4 | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 4 | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 4 | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 7.7/15.4 = 50.0% | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

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 (BAU/ml) | 377 | 3227.9/4735.3 = 68.2% (61.8%, 73.9%) | 4398/4735.3 = 92.9% (88.8%, 95.5%) | 3990.3/4735.3 = 84.3% (78.8%, 88.5%) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 377 | 4677.2/4735.3 = 98.8% (96.0%, 99.6%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4724.3/4735.3 = 99.8% (98.4%, 100.0%) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 377 | 4724.3/4735.3 = 99.8% (98.4%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 116 | 370.8/510.3 = 72.7% (61.4%, 81.6%) | 485.9/510.3 = 95.2% (87.3%, 98.3%) | 453.5/510.3 = 88.9% (79.6%, 94.2%) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 116 | 505.7/510.3 = 99.1% (93.7%, 99.9%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 116 | 501.7/510.3 = 98.3% (88.6%, 99.8%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 263.3/515.5 = 51.1% (40.2%, 61.9%) | 430.1/515.5 = 83.4% (72.6%, 90.5%) | 392.1/515.5 = 76.1% (65.1%, 84.4%) |
| Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 510.3/515.5 = 99.0% (93.0%, 99.9%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 510.3/515.5 = 99.0% (93.0%, 99.9%) |

(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 (BAU/ml) | 120 | 492.5/515.5 = 95.5% (87.1%, 98.5%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 377 | 3999.4/4735.3 = 84.5% (79.0%, 88.7%) | 4595.7/4735.3 = 97.1% (93.7%, 98.6%) | 4392.4/4735.3 = 92.8% (88.6%, 95.5%) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 377 | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 377 | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 116 | 488.5/510.3 = 95.7% (86.9%, 98.7%) | 505.7/510.3 = 99.1% (93.7%, 99.9%) | 497.1/510.3 = 97.4% (89.3%, 99.4%) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 116 | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 116 | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 407.7/515.5 = 79.1% (67.7%, 87.2%) | 468.2/515.5 = 90.8% (80.3%, 96.0%) | 451.6/515.5 = 87.6% (77.1%, 93.7%) |
| Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 515.5/515.5 = 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 (BAU/ml) | 120 | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 3671.4/6391.7 = 57.4% (51.0%, 63.6%) | 5426.8/6391.7 = 84.9% (79.4%, 89.2%) | 4873/6391.7 = 76.2% (70.1%, 81.4%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 6276.7/6391.7 = 98.2% (95.1%, 99.4%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 6314.5/6391.7 = 98.8% (96.1%, 99.6%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 569.8/723.7 = 78.7% (67.6%, 86.8%) | 684/723.7 = 94.5% (85.4%, 98.1%) | 619.4/723.7 = 85.6% (74.6%, 92.3%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 339/609.5 = 55.6% (44.3%, 66.4%) | 467.7/609.5 = 76.7% (65.0%, 85.4%) | 432.7/609.5 = 71.0% (59.3%, 80.4%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 553.7/609.5 = 90.8% (80.0%, 96.1%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 598.3/609.5 = 98.2% (87.8%, 99.8%) |

(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 (BAU/ml) | 121 | 598.3/609.5 = 98.2% (87.8%, 99.8%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 5052.5/6391.7 = 79.0% (73.1%, 84.0%) | 5955.6/6391.7 = 93.2% (88.9%, 95.9%) | 5723/6391.7 = 89.5% (84.7%, 93.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 6372/6391.7 = 99.7% (97.8%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 690.6/723.7 = 95.4% (86.0%, 98.6%) | 710.4/723.7 = 98.2% (87.7%, 99.8%) | 690.6/723.7 = 95.4% (86.0%, 98.6%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 455.4/609.5 = 74.7% (63.2%, 83.6%) | 555.5/609.5 = 91.2% (81.0%, 96.1%) | 518.7/609.5 = 85.1% (74.3%, 91.9%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 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 (BAU/ml) | 121 | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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



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 (BAU/ml) | 181 | 2421.6/3706.5 = 65.3% (57.4%, 72.5%) | 3399.4/3706.5 = 91.7% (86.5%, 95.0%) | 3027.5/3706.5 = 81.7% (74.8%, 87.0%) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 181 | 3648.4/3706.5 = 98.4% (94.9%, 99.5%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3695.6/3706.5 = 99.7% (97.9%, 100.0%) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 181 | 3695.6/3706.5 = 99.7% (97.9%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 60 | 284.5/421.1 = 67.6% (54.1%, 78.6%) | 396.7/421.1 = 94.2% (84.5%, 98.0%) | 365.7/421.1 = 86.8% (75.7%, 93.3%) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 60 | 416.5/421.1 = 98.9% (92.2%, 99.9%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 60 | 412.5/421.1 = 98.0% (86.1%, 99.7%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 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 (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 62 | 181.1/412 = 44.0% (31.2%, 57.5%) | 332/412 = 80.6% (67.2%, 89.4%) | 300.7/412 = 73.0% (59.5%, 83.3%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 62 | 406.7/412 = 98.7% (91.2%, 99.8%) | 412/412 = 100.0% (100.0%, 100.0%) | 406.7/412 = 98.7% (91.2%, 99.8%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 62 | 388.9/412 = 94.4% (83.8%, 98.2%) | 412/412 = 100.0% (100.0%, 100.0%) | 412/412 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 181 | 3037.2/3706.5 = 81.9% (75.1%, 87.2%) | 3571.7/3706.5 = 96.4% (92.1%, 98.4%) | 3387.7/3706.5 = 91.4% (86.0%, 94.8%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 181 | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 181 | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 60 | 399.2/421.1 = 94.8% (84.1%, 98.4%) | 416.5/421.1 = 98.9% (92.2%, 99.9%) | 407.9/421.1 = 96.9% (87.0%, 99.3%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 60 | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 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 (BAU/ml) | 60 | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 62 | 307.9/412 = 74.7% (60.9%, 84.9%) | 364.7/412 = 88.5% (75.6%, 95.0%) | 351.7/412 = 85.4% (72.3%, 92.9%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 62 | 412/412 = 100.0% (100.0%, 100.0%) | 412/412 = 100.0% (100.0%, 100.0%) | 412/412 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 62 | 412/412 = 100.0% (100.0%, 100.0%) | 412/412 = 100.0% (100.0%, 100.0%) | 412/412 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 176 | 2588.8/5062.5 = 51.1% (43.3%, 58.9%) | 4145.5/5062.5 = 81.9% (74.9%, 87.2%) | 3626/5062.5 = 71.6% (64.0%, 78.2%) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 176 | 4947.5/5062.5 = 97.7% (93.8%, 99.2%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 5062.5/5062.5 = 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 (BAU/ml) | 176 | 4985.2/5062.5 = 98.5% (95.0%, 99.5%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 54 | 423.2/561.9 = 75.3% (61.1%, 85.6%) | 522.3/561.9 = 92.9% (81.2%, 97.6%) | 462.7/561.9 = 82.3% (68.3%, 91.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 54 | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 54 | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 239.1/481 = 49.7% (36.1%, 63.4%) | 343.3/481 = 71.4% (56.9%, 82.5%) | 316.5/481 = 65.8% (51.4%, 77.8%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 425.2/481 = 88.4% (74.8%, 95.1%) | 481/481 = 100.0% (100.0%, 100.0%) | 469.9/481 = 97.7% (84.5%, 99.7%) |

(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 (BAU/ml) | 58 | 469.9/481 = 97.7% (84.5%, 99.7%) | 481/481 = 100.0% (100.0%, 100.0%) | 481/481 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 176 | 3798.6/5062.5 = 75.0% (67.6%, 81.2%) | 4640.1/5062.5 = 91.7% (86.2%, 95.1%) | 4428/5062.5 = 87.5% (81.4%, 91.7%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 176 | 5042.8/5062.5 = 99.6% (97.2%, 99.9%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 176 | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 54 | 528.8/561.9 = 94.1% (82.0%, 98.3%) | 548.7/561.9 = 97.6% (84.2%, 99.7%) | 528.8/561.9 = 94.1% (82.0%, 98.3%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 54 | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 54 | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 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 (BAU/ml) | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 343.3/481 = 71.4% (56.9%, 82.5%) | 431.2/481 = 89.6% (76.6%, 95.8%) | 398.4/481 = 82.8% (69.1%, 91.2%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 481/481 = 100.0% (100.0%, 100.0%) | 481/481 = 100.0% (100.0%, 100.0%) | 481/481 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 481/481 = 100.0% (100.0%, 100.0%) | 481/481 = 100.0% (100.0%, 100.0%) | 481/481 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 806.3/1028.8 = 78.4% (71.9%, 83.7%) | 998.6/1028.8 = 97.1% (93.1%, 98.8%) | 962.9/1028.8 = 93.6% (88.9%, 96.4%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 86.3/89.2 = 96.8% (87.6%, 99.2%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 87.8/89.2 = 98.4% (88.9%, 99.8%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 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 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 82.2/103.6 = 79.3% (66.6%, 88.1%) | 98.1/103.6 = 94.8% (84.5%, 98.4%) | 91.4/103.6 = 88.2% (76.8%, 94.4%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 962.1/1028.8 = 93.5% (89.1%, 96.2%) | 1024/1028.8 = 99.5% (96.7%, 99.9%) | 1004.7/1028.8 = 97.7% (94.5%, 99.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 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 Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 99.8/103.6 = 96.4% (86.2%, 99.1%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 99.8/103.6 = 96.4% (86.2%, 99.1%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 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 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 1082.6/1329.2 = 81.4% (75.3%, 86.3%) | 1281.3/1329.2 = 96.4% (92.6%, 98.3%) | 1247/1329.2 = 93.8% (89.4%, 96.5%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 64 | 146.6/161.8 = 90.6% (80.3%, 95.8%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 156.7/161.8 = 96.9% (88.0%, 99.2%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 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 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 99.9/128.4 = 77.8% (65.6%, 86.5%) | 124.3/128.4 = 96.8% (87.8%, 99.2%) | 116.2/128.4 = 90.5% (80.1%, 95.7%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 1253.9/1329.2 = 94.3% (90.0%, 96.8%) | 1315.5/1329.2 = 99.0% (95.9%, 99.7%) | 1295/1329.2 = 97.4% (93.9%, 98.9%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-----------------------------------|--------|---------|---------------------|-------------------------|----|--|--|--|
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 112.1/128.4 = 87.3% (76.3%, 93.6%) | 124.3/128.4 = 96.8% (87.8%, 99.2%) | 120.3/128.4 = 93.7% (84.0%, 97.7%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants with concentration above the specified positivity cut-off, with a separate cut-off for each antigen Spike, RBD, N (10.8424, 14.0858, and 23.4711 respectively, in IU/ml).

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

2.6 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 cID50 | 747 | 9987.8/11127 = 89.8% (86.3%, 92.5%) | 9987.8/11127 = 89.8% (86.3%, 92.5%) | 8580.4/11127 = 77.1% (72.9%, 80.9%) |
| | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 234 | 1174.4/1234 = 95.2% (89.1%, 97.9%) | 1216.1/1234 = 98.6% (93.4%, 99.7%) | 1050.2/1234 = 85.1% (77.6%, 90.4%) |
| | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 241 | 887.2/1125 = 78.9% (71.2%, 84.9%) | 888.9/1125 = 79.0% (71.4%, 85.0%) | 649.5/1125 = 57.7% (49.8%, 65.3%) |
| | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 747 | 11127/11127 = 100.0% (100.0%, 100.0%) | 11127/11127 = 100.0% (100.0%, 100.0%) | 11127/11127 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) | 1234/1234 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 138 | 47.7/11103 = 0.4% (0.1%, 3.0%) | 47.7/11103 = 0.4% (0.1%, 3.0%) | 0/11103 = 0.0% (0.0%, 0.0%) |
| | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 1125/1125 = 100.0% (100.0%, 100.0%) | 1125/1125 = 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 = 4.48, 21.48 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 cID50 | 357 | 7651.1/8769 = 87.3% (82.8%, 90.7%) | 7651.1/8769 = 87.3% (82.8%, 90.7%) | 6442.5/8769 = 73.5% (68.2%, 78.2%) |
| Age < 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 114 | 923.4/983 = 93.9% (86.4%, 97.4%) | 965.1/983 = 98.2% (91.7%, 99.6%) | 801.7/983 = 81.6% (72.2%, 88.3%) |
| Age < 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 72 | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) |
| Age < 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 668.1/893 = 74.8% (65.3%, 82.4%) | 668.1/893 = 74.8% (65.3%, 82.4%) | 457.2/893 = 51.2% (41.6%, 60.7%) |
| Age < 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 357 | 8769/8769 = 100.0% (100.0%, 100.0%) | 8769/8769 = 100.0% (100.0%, 100.0%) | 8769/8769 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 114 | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) | 983/983 = 100.0% (100.0%, 100.0%) |
| Age < 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 72 | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) | 0/8343 = 0.0% (0.0%, 0.0%) |
| Age < 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 893/893 = 100.0% (100.0%, 100.0%) | 893/893 = 100.0% (100.0%, 100.0%) | 893/893 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 390 | 2336.7/2358 = 99.1% (97.6%, 99.7%) | 2336.7/2358 = 99.1% (97.6%, 99.7%) | 2137.9/2358 = 90.7% (87.3%, 93.2%) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 248.5/251 = 99.0% (93.0%, 99.9%) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 66 | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) | 0/2760 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 219.1/232 = 94.4% (88.7%, 97.4%) | 220.8/232 = 95.2% (89.5%, 97.8%) | 192.3/232 = 82.9% (75.0%, 88.6%) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 390 | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) | 2358/2358 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 120 | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) | 251/251 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 66 | 47.7/2760 = 1.7% (0.2%, 11.8%) | 47.7/2760 = 1.7% (0.2%, 11.8%) | 0/2760 = 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 cID50 | 121 | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 100.0% (100.0%, 100.0%) | 232/232 = 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 = 4.48, 21.48 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 cID50 | 381 | 3885.1/4152.9 = 93.6% (89.7%, 96.0%) | 3885.1/4152.9 = 93.6% (89.7%, 96.0%) | 3258.7/4152.9 = 78.5% (73.2%, 83.0%) |
| At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 111 | 429.2/440.4 = 97.5% (89.9%, 99.4%) | 435.8/440.4 = 98.9% (92.7%, 99.9%) | 393.1/440.4 = 89.3% (80.1%, 94.5%) |
| At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 71 | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 117 | 335/404.4 = 82.8% (73.4%, 89.4%) | 336.7/404.4 = 83.3% (73.8%, 89.8%) | 273.1/404.4 = 67.5% (57.2%, 76.4%) |
| At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 381 | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) | 4152.9/4152.9 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 111 | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) | 440.4/440.4 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 71 | 47.7/4237.6 = 1.1% (0.2%, 7.8%) | 47.7/4237.6 = 1.1% (0.2%, 7.8%) | 0/4237.6 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 117 | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) | 404.4/404.4 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 366 | 6102.7/6974.1 = 87.5% (82.2%, 91.4%) | 6102.7/6974.1 = 87.5% (82.2%, 91.4%) | 5321.7/6974.1 = 76.3% (70.2%, 81.5%) |
| Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 123 | 745.2/793.6 = 93.9% (84.5%, 97.8%) | 780.3/793.6 = 98.3% (88.7%, 99.8%) | 657.1/793.6 = 82.8% (71.6%, 90.2%) |
| Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 124 | 552.2/720.6 = 76.6% (65.6%, 85.0%) | 552.2/720.6 = 76.6% (65.6%, 85.0%) | 376.4/720.6 = 52.2% (41.4%, 62.9%) |
| Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 366 | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) | 6974.1/6974.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 123 | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 100.0% (100.0%, 100.0%) | 793.6/793.6 = 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 cID50 | 67 | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) | 0/6865.4 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 124 | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 720.6/720.6 = 100.0% (100.0%, 100.0%) | 720.6/720.6 = 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 = 4.48, 21.48 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 cID50 | 185 | 2702/2965 = 91.1% (85.7%, 94.6%) | 2702/2965 = 91.1% (85.7%, 94.6%) | 2193.6/2965 = 74.0% (66.8%, 80.1%) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 309.8/321 = 96.5% (86.2%, 99.2%) | 316.4/321 = 98.6% (90.0%, 99.8%) | 276.2/321 = 86.1% (73.7%, 93.1%) |
| Age < 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 59 | 228.4/292 = 78.2% (65.5%, 87.2%) | 228.4/292 = 78.2% (65.5%, 87.2%) | 178.7/292 = 61.2% (47.8%, 73.1%) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 185 | 2965/2965 = 100.0% (100.0%, 100.0%) | 2965/2965 = 100.0% (100.0%, 100.0%) | 2965/2965 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) | 321/321 = 100.0% (100.0%, 100.0%) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 36 | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) | 0/2792 = 0.0% (0.0%, 0.0%) |
| Age < 65 At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 59 | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) | 292/292 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 172 | 4949.1/5804 = 85.3% (78.9%, 90.0%) | 4949.1/5804 = 85.3% (78.9%, 90.0%) | 4248.9/5804 = 73.2% (65.9%, 79.4%) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 613.6/662 = 92.7% (81.4%, 97.4%) | 648.7/662 = 98.0% (86.4%, 99.7%) | 525.5/662 = 79.4% (66.1%, 88.4%) |
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 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 cID50 | 61 | 439.8/601 = 73.2% (60.0%, 83.2%) | 439.8/601 = 73.2% (60.0%, 83.2%) | 278.6/601 = 46.4% (33.8%, 59.3%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 172 | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) | 5804/5804 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) | 662/662 = 100.0% (100.0%, 100.0%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 36 | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) | 0/5551 = 0.0% (0.0%, 0.0%) |
| Age < 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 61 | 601/601 = 100.0% (100.0%, 100.0%) | 601/601 = 100.0% (100.0%, 100.0%) | 601/601 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 1183.1/1187.9 = 99.6% (97.1%, 99.9%) | 1183.1/1187.9 = 99.6% (97.1%, 99.9%) | 1065.1/1187.9 = 89.7% (84.4%, 93.3%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 116.9/119.4 = 97.9% (85.8%, 99.7%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 35 | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) | 0/1445.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 106.7/112.4 = 94.9% (84.8%, 98.4%) | 108.4/112.4 = 96.4% (86.2%, 99.1%) | 94.4/112.4 = 84.0% (71.7%, 91.6%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) | 1187.9/1187.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 55 | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) | 119.4/119.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 35 | 47.7/1445.6 = 3.3% (0.4%, 21.5%) | 47.7/1445.6 = 3.3% (0.4%, 21.5%) | 0/1445.6 = 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 cID50 | 58 | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) | 112.4/112.4 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 1153.6/1170.1 = 98.6% (95.6%, 99.6%) | 1153.6/1170.1 = 98.6% (95.6%, 99.6%) | 1072.7/1170.1 = 91.7% (86.7%, 94.9%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 112.4/119.6 = 94.0% (84.8%, 97.8%) | 112.4/119.6 = 94.0% (84.8%, 97.8%) | 97.8/119.6 = 81.8% (70.3%, 89.5%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) | 1170.1/1170.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 65 | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) | 131.6/131.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 31 | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) | 0/1314.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) | 119.6/119.6 = 100.0% (100.0%, 100.0%) |

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 = 4.48, 21.48 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 cID50 | 320 | 4228.5/4733.6 = 89.3% (83.6%, 93.2%) | 4228.5/4733.6 = 89.3% (83.6%, 93.2%) | 3678/4733.6 = 77.7% (71.0%, 83.2%) |
| Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 95 | 488.3/510.2 = 95.7% (83.6%, 99.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 413.1/510.2 = 81.0% (67.6%, 89.6%) |
| Male | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 108 | 390.3/501.1 = 77.9% (65.6%, 86.7%) | 390.3/501.1 = 77.9% (65.6%, 86.7%) | 275.2/501.1 = 54.9% (42.8%, 66.5%) |
| Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 320 | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) | 4733.6/4733.6 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 95 | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) | 510.2/510.2 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) | 0/5325.1 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 108 | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) | 501.1/501.1 = 100.0% (100.0%, 100.0%) |
| Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 427 | 5759.3/6393.4 = 90.1% (85.2%, 93.5%) | 5759.3/6393.4 = 90.1% (85.2%, 93.5%) | 4902.4/6393.4 = 76.7% (70.9%, 81.6%) |
| Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 139 | 686.1/723.8 = 94.8% (85.8%, 98.2%) | 705.9/723.8 = 97.5% (89.0%, 99.5%) | 637.1/723.8 = 88.0% (77.8%, 93.9%) |
| Female | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 75 | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 133 | 496.9/623.9 = 79.6% (69.1%, 87.2%) | 498.6/623.9 = 79.9% (69.4%, 87.5%) | 374.3/623.9 = 60.0% (49.3%, 69.8%) |
| Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 427 | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) | 6393.4/6393.4 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 139 | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) | 723.8/723.8 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 75 | 47.7/5777.9 = 0.8% (0.1%, 5.9%) | 47.7/5777.9 = 0.8% (0.1%, 5.9%) | 0/5777.9 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------|--------|---------|---------------------|-----------------------|-----|--|--|--|
| Female | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 133 | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 623.9/623.9 = 100.0% (100.0%, 100.0%) | 623.9/623.9 = 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 = 4.48, 21.48 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 cID50 | 201 | 4401.3/5028.5 = 87.5% (81.3%, 91.9%) | 4401.3/5028.5 = 87.5% (81.3%, 91.9%) | 3678/5028.5 = 73.1% (66.0%, 79.3%) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 66 | 535.4/573.1 = 93.4% (82.2%, 97.8%) | 555.2/573.1 = 96.9% (86.2%, 99.4%) | 486.4/573.1 = 84.9% (72.1%, 92.4%) |
| Age < 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 70 | 381.1/502.7 = 75.8% (63.0%, 85.2%) | 381.1/502.7 = 75.8% (63.0%, 85.2%) | 271.7/502.7 = 54.1% (41.4%, 66.2%) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 201 | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) | 5028.5/5028.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 66 | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) | 573.1/573.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 38 | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) | 0/4192.3 = 0.0% (0.0%, 0.0%) |
| Age < 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 70 | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) | 502.7/502.7 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 156 | 3249.8/3740.5 = 86.9% (79.6%, 91.8%) | 3249.8/3740.5 = 86.9% (79.6%, 91.8%) | 2764.5/3740.5 = 73.9% (65.6%, 80.8%) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 48 | 388.1/409.9 = 94.7% (79.7%, 98.8%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 315.4/409.9 = 76.9% (60.7%, 87.8%) |
| Age < 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 50 | 287.1/390.3 = 73.5% (58.1%, 84.8%) | 287.1/390.3 = 73.5% (58.1%, 84.8%) | 185.5/390.3 = 47.5% (32.9%, 62.5%) |

(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 cID50 | 156 | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) | 3740.5/3740.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 48 | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) | 409.9/409.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 34 | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) | 0/4150.7 = 0.0% (0.0%, 0.0%) |
| Age < 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 50 | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) | 390.3/390.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 226 | 1358/1364.9 = 99.5% (96.5%, 99.9%) | 1358/1364.9 = 99.5% (96.5%, 99.9%) | 1224.3/1364.9 = 89.7% (84.8%, 93.2%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 37 | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 115.8/121.3 = 95.5% (86.6%, 98.6%) | 117.5/121.3 = 96.9% (88.1%, 99.3%) | 102.6/121.3 = 84.6% (73.3%, 91.7%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 226 | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) | 1364.9/1364.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 73 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 37 | 47.7/1585.6 = 3.0% (0.4%, 19.9%) | 47.7/1585.6 = 3.0% (0.4%, 19.9%) | 0/1585.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) | 121.3/121.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 164 | 978.7/993.1 = 98.5% (95.6%, 99.5%) | 978.7/993.1 = 98.5% (95.6%, 99.5%) | 913.5/993.1 = 92.0% (86.8%, 95.3%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------|--------|---------|---------------------|-----------------------|-----|--|--|--|
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 97.7/100.3 = 97.5% (83.3%, 99.7%) |
| Age \geq 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 103.3/110.7 = 93.3% (82.9%, 97.5%) | 103.3/110.7 = 93.3% (82.9%, 97.5%) | 89.7/110.7 = 81.0% (68.4%, 89.3%) |
| Age \geq 65 Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 164 | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) | 993.1/993.1 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 47 | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) | 100.3/100.3 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 29 | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) | 0/1174.4 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 100.0% (100.0%, 100.0%) | 110.7/110.7 = 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 = 4.48, 21.48 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 cID50 | 99 | 927.7/1009.2 = 91.9% (79.8%, 97.0%) | 927.7/1009.2 = 91.9% (79.8%, 97.0%) | 794.2/1009.2 = 78.7% (65.8%, 87.6%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 31 | 100.5/105.1 = 95.6% (72.3%, 99.5%) | 100.5/105.1 = 95.6% (72.3%, 99.5%) | 86.6/105.1 = 82.4% (60.4%, 93.5%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 34 | 116.6/148.4 = 78.6% (55.9%, 91.4%) | 116.6/148.4 = 78.6% (55.9%, 91.4%) | 78/148.4 = 52.6% (32.5%, 71.8%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 99 | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) | 1009.2/1009.2 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 31 | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) | 105.1/105.1 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 20 | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) | 0/991.8 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 34 | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) | 148.4/148.4 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 623 | 8819.4/9866.2 = 89.4% (85.5%, 92.3%) | 8819.4/9866.2 = 89.4% (85.5%, 92.3%) | 7582.5/9866.2 = 76.9% (72.2%, 80.9%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 194 | 1046.7/1101.6 = 95.0% (88.2%, 98.0%) | 1088.3/1101.6 = 98.8% (91.8%, 99.8%) | 936.3/1101.6 = 85.0% (76.6%, 90.7%) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 113 | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 0.0% (0.0%, 0.0%) | 0/9818.5 = 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 cID50 | 201 | 755.2/949.1 = 79.6% (71.1%, 86.1%) | 756.9/949.1 = 79.8% (71.3%, 86.2%) | 560.4/949.1 = 59.0% (50.4%, 67.2%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 623 | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) | 9866.2/9866.2 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 194 | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) | 1101.6/1101.6 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 113 | 47.7/9818.5 = 0.5% (0.1%, 3.5%) | 47.7/9818.5 = 0.5% (0.1%, 3.5%) | 0/9818.5 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 201 | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) | 949.1/949.1 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 25 | 240.7/251.7 = 95.7% (72.0%, 99.5%) | 240.7/251.7 = 95.7% (72.0%, 99.5%) | 203.7/251.7 = 80.9% (49.8%, 94.8%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 6 | 15.5/27.5 = 56.2% (5.7%, 96.5%) | 15.5/27.5 = 56.2% (5.7%, 96.5%) | 11.1/27.5 = 40.3% (3.1%, 93.3%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 25 | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) | 251.7/251.7 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 9 | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) | 27.3/27.3 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 5 | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) | 0/292.8 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------------|--------|---------|---------------------|-----------------------|---|--|--|--|
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 6 | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 100.0% (100.0%, 100.0%) | 27.5/27.5 = 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 = 4.48, 21.48 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 cID50 | 370 | 5527.1/6391.7 = 86.5% (81.0%, 90.6%) | 5527.1/6391.7 = 86.5% (81.0%, 90.6%) | 4717.7/6391.7 = 73.8% (67.6%, 79.2%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 677.4/723.7 = 93.6% (83.6%, 97.7%) | 710.4/723.7 = 98.2% (87.7%, 99.8%) | 595.4/723.7 = 82.3% (70.8%, 89.9%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 490/609.5 = 80.4% (69.0%, 88.3%) | 490/609.5 = 80.4% (69.0%, 88.3%) | 336/609.5 = 55.1% (43.9%, 65.8%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 47.7/6564.1 = 0.7% (0.1%, 5.2%) | 47.7/6564.1 = 0.7% (0.1%, 5.2%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 184 | 2083.6/2208.2 = 94.4% (87.8%, 97.5%) | 2083.6/2208.2 = 94.4% (87.8%, 97.5%) | 1841.1/2208.2 = 83.4% (75.1%, 89.3%) |
| Black or African American | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 238.1/246.7 = 96.5% (77.9%, 99.5%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 224.9/246.7 = 91.1% (74.5%, 97.3%) |

(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 cID50 | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 45 | 131.2/163.1 = 80.4% (61.3%, 91.5%) | 132.9/163.1 = 81.5% (62.0%, 92.2%) | 114/163.1 = 69.9% (50.8%, 84.0%) |
| Black or African American | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 184 | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) | 2208.2/2208.2 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) | 246.7/246.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 40 | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) | 0/2287.9 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 45 | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) | 163.1/163.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 56 | 905.8/943.6 = 96.0% (75.7%, 99.5%) | 905.8/943.6 = 96.0% (75.7%, 99.5%) | 741.9/943.6 = 78.6% (61.4%, 89.5%) |
| Asian | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 102.3/122.1 = 83.8% (47.9%, 96.7%) |
| Asian | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 27 | 102.4/140.4 = 72.9% (46.2%, 89.4%) | 102.4/140.4 = 72.9% (46.2%, 89.4%) | 78.8/140.4 = 56.1% (32.3%, 77.4%) |
| Asian | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 56 | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 100.0% (100.0%, 100.0%) | 943.6/943.6 = 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 cID50 | 19 | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) | 122.1/122.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 10 | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) | 0/921.8 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 27 | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) | 140.4/140.4 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 158.3/185.7 = 85.2% (36.9%, 98.3%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 7 | 28.5/31.9 = 89.4% (45.1%, 98.8%) | 28.5/31.9 = 89.4% (45.1%, 98.8%) | 24.1/31.9 = 75.7% (23.7%, 96.9%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) | 185.7/185.7 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) | 42.3/42.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 2 | 0/130 = 0.0% | 0/130 = 0.0% | 0/130 = 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 cID50 | 7 | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) | 31.9/31.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 17 | 175.4/186.3 = 94.1% (62.8%, 99.3%) | 175.4/186.3 = 94.1% (62.8%, 99.3%) | 115.2/186.3 = 61.8% (29.8%, 86.1%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 17 | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) | 186.3/186.3 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 4 | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 100.0% (100.0%, 100.0%) | 12.9/12.9 = 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 | Placebo | Negative | Pseudovirus-nAb cID50 | 2 | 0/194.3 = 0.0% | 0/194.3 = 0.0% | 0/194.3 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% | 9.4/9.4 = 100.0% |
| Multiracial | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 57 | 682.4/725.5 = 94.1% (78.9%, 98.5%) | 682.4/725.5 = 94.1% (78.9%, 98.5%) | 637.2/725.5 = 87.8% (74.7%, 94.6%) |
| Multiracial | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 35.9/40.5 = 88.6% (32.4%, 99.2%) |
| Multiracial | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 16 | 37.4/48.2 = 77.6% (43.6%, 94.0%) | 37.4/48.2 = 77.6% (43.6%, 94.0%) | 28/48.2 = 58.2% (25.9%, 84.7%) |
| Multiracial | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 57 | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) | 725.5/725.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) | 40.5/40.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 8 | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) | 0/387.8 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 16 | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) | 48.2/48.2 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 183.8/203.6 = 90.3% (47.3%, 99.0%) | 183.8/203.6 = 90.3% (47.3%, 99.0%) | 183.8/203.6 = 90.3% (47.3%, 99.0%) |
| Other | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 13 | 54.1/72.9 = 74.1% (29.8%, 95.1%) | 54.1/72.9 = 74.1% (29.8%, 95.1%) | 54.1/72.9 = 74.1% (29.8%, 95.1%) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------------|--------|---------|---------------------|-----------------------|----|--|--|--|
| Other | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) | 203.6/203.6 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 7 | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) | 24.7/24.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 1 | 0/47.7 = 0.0% | 0/47.7 = 0.0% | 0/47.7 = 0.0% |
| Other | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 13 | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) | 72.9/72.9 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 4 | 14.4/25.4 = 56.9% (0.9%, 99.5%) | 14.4/25.4 = 56.9% (0.9%, 99.5%) | 14.4/25.4 = 56.9% (0.9%, 99.5%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 7.7/15.4 = 50.0% | 7.7/15.4 = 50.0% | 0/15.4 = 0.0% |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 4 | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) | 25.4/25.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 1 | 0/48.4 = 0.0% | 0/48.4 = 0.0% | 0/48.4 = 0.0% |
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 15.4/15.4 = 100.0% | 15.4/15.4 = 100.0% | 15.4/15.4 = 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 = 4.48, 21.48 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 cID50 | 377 | 4460.7/4735.3 = 94.2% (90.0%, 96.7%) | 4460.7/4735.3 = 94.2% (90.0%, 96.7%) | 3862.7/4735.3 = 81.6% (75.9%, 86.1%) |
| Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 116 | 497.1/510.3 = 97.4% (89.3%, 99.4%) | 505.7/510.3 = 99.1% (93.7%, 99.9%) | 454.8/510.3 = 89.1% (78.5%, 94.8%) |
| Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 397.2/515.5 = 77.1% (65.9%, 85.4%) | 398.9/515.5 = 77.4% (66.2%, 85.7%) | 313.5/515.5 = 60.8% (49.4%, 71.1%) |
| Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 377 | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) | 4735.3/4735.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 116 | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) | 510.3/510.3 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 75 | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) | 0/4538.9 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) | 515.5/515.5 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 5527.1/6391.7 = 86.5% (81.0%, 90.6%) | 5527.1/6391.7 = 86.5% (81.0%, 90.6%) | 4717.7/6391.7 = 73.8% (67.6%, 79.2%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 677.4/723.7 = 93.6% (83.6%, 97.7%) | 710.4/723.7 = 98.2% (87.7%, 99.8%) | 595.4/723.7 = 82.3% (70.8%, 89.9%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 0.0% (0.0%, 0.0%) | 0/6564.1 = 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 cID50 | 121 | 490/609.5 = 80.4% (69.0%, 88.3%) | 490/609.5 = 80.4% (69.0%, 88.3%) | 336/609.5 = 55.1% (43.9%, 65.8%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) | 6391.7/6391.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) | 723.7/723.7 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 47.7/6564.1 = 0.7% (0.1%, 5.2%) | 47.7/6564.1 = 0.7% (0.1%, 5.2%) | 0/6564.1 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 100.0% (100.0%, 100.0%) | 609.5/609.5 = 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 = 4.48, 21.48 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 cID50 | 181 | 3446.3/3706.5 = 93.0% (87.6%, 96.1%) | 3446.3/3706.5 = 93.0% (87.6%, 96.1%) | 2951.3/3706.5 = 79.6% (72.4%, 85.3%) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 60 | 407.9/421.1 = 96.9% (87.0%, 99.3%) | 416.5/421.1 = 98.9% (92.2%, 99.9%) | 365.6/421.1 = 86.8% (74.2%, 93.8%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 62 | 302.5/412 = 73.4% (59.7%, 83.7%) | 302.5/412 = 73.4% (59.7%, 83.7%) | 229.3/412 = 55.7% (42.0%, 68.5%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 181 | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) | 3706.5/3706.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 60 | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) | 421.1/421.1 = 100.0% (100.0%, 100.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 40 | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) | 0/3256.8 = 0.0% (0.0%, 0.0%) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 62 | 412/412 = 100.0% (100.0%, 100.0%) | 412/412 = 100.0% (100.0%, 100.0%) | 412/412 = 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 cID50 | 176 | 4204.7/5062.5 = 83.1% (76.2%, 88.3%) | 4204.7/5062.5 = 83.1% (76.2%, 88.3%) | 3491.2/5062.5 = 69.0% (61.3%, 75.7%) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 54 | 515.6/561.9 = 91.8% (78.9%, 97.1%) | 548.7/561.9 = 97.6% (84.2%, 99.7%) | 436.2/561.9 = 77.6% (63.0%, 87.6%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 365.6/481 = 76.0% (61.8%, 86.1%) | 365.6/481 = 76.0% (61.8%, 86.1%) | 227.9/481 = 47.4% (34.0%, 61.1%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 176 | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) | 5062.5/5062.5 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 54 | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) | 561.9/561.9 = 100.0% (100.0%, 100.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 32 | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) | 0/5086.2 = 0.0% (0.0%, 0.0%) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 481/481 = 100.0% (100.0%, 100.0%) | 481/481 = 100.0% (100.0%, 100.0%) | 481/481 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 1014.3/1028.8 = 98.6% (95.7%, 99.6%) | 1014.3/1028.8 = 98.6% (95.7%, 99.6%) | 911.4/1028.8 = 88.6% (83.0%, 92.5%) |

(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 cID50 | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 94.7/103.6 = 91.5% (80.7%, 96.5%) | 96.4/103.6 = 93.1% (82.6%, 97.5%) | 84.2/103.6 = 81.3% (68.9%, 89.5%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) | 1028.8/1028.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) | 89.2/89.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 35 | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) | 0/1282.1 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) | 103.6/103.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 1322.4/1329.2 = 99.5% (96.4%, 99.9%) | 1322.4/1329.2 = 99.5% (96.4%, 99.9%) | 1226.5/1329.2 = 92.3% (87.5%, 95.3%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 159.2/161.8 = 98.4% (89.3%, 99.8%) |

(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 cID50 | 31 | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 124.3/128.4 = 96.8% (87.8%, 99.2%) | 124.3/128.4 = 96.8% (87.8%, 99.2%) | 108/128.4 = 84.1% (72.6%, 91.4%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) | 1329.2/1329.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 64 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 31 | 47.7/1477.9 = 3.2% (0.4%, 21.4%) | 47.7/1477.9 = 3.2% (0.4%, 21.4%) | 0/1477.9 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 100.0% (100.0%, 100.0%) | 128.4/128.4 = 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 = 4.48, 21.48 for pseudovirus-nAb ID50, ID80, respectively.

2.7 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 (BAU/ml) | 747 | 0.05 (0.05, 0.05) |
| | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 747 | 0.80 (0.80, 0.80) |
| | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 747 | 0.15 (0.15, 0.15) |
| | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 747 | 1.21 (1.21, 1.21) |
| | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 747 | 7.51 (7.51, 7.51) |
| | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 234 | 0.05 (0.05, 0.05) |
| | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 234 | 0.81 (0.79, 0.84) |
| | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 234 | 0.16 (0.15, 0.16) |
| | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 234 | 1.67 (1.51, 1.84) |
| | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 234 | 9.87 (9.00, 10.83) |
| | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 138 | 0.05 (0.05, 0.05) |
| | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 138 | 0.80 (0.80, 0.80) |
| | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 138 | 0.15 (0.15, 0.15) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|-----|-----------------------------|
| | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 138 | 1.21 (1.21, 1.22) |
| | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 138 | 7.72 (7.51, 7.95) |
| | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 241 | 0.05 (0.05, 0.05) |
| | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 241 | 0.80 (0.80, 0.80) |
| | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 241 | 0.15 (0.15, 0.16) |
| | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 241 | 1.64 (1.49, 1.80) |
| | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 241 | 9.87 (9.08, 10.74) |
| | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 747 | 39.38 (33.04, 46.94) |
| | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 747 | 476.21 (415.28, 546.08) |
| | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 747 | 266.96 (239.24, 297.88) |
| | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 747 | 17.38 (15.88, 19.02) |
| | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 747 | 26.00 (24.01, 28.15) |
| | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 234 | 81.71 (61.73, 108.16) |
| | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 234 | 842.22 (650.71, 1090.08) |
| | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 234 | 473.58 (396.77, 565.26) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 234 | 32.67 (28.06, 38.03) |
| | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 234 | 51.20 (44.63, 58.75) |
| | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 138 | 0.05 (0.05, 0.05) |
| | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 138 | 0.80 (0.80, 0.80) |
| | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 138 | 0.15 (0.15, 0.15) |
| | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 138 | 1.22 (1.20, 1.23) |
| | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 138 | 7.51 (7.51, 7.51) |
| | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 241 | 27.27 (20.41, 36.44) |
| | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 241 | 303.87 (230.21, 401.11) |
| | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 241 | 169.66 (136.33, 211.14) |
| | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 241 | 11.38 (9.63, 13.45) |
| | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 241 | 20.22 (17.73, 23.07) |
| | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 747 | 169.29 (138.13, 207.49) |
| | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 747 | 4768.44 (4097.10, 5549.78) |
| | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 747 | 3384.52 (2945.38, 3889.12) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 747 | 427.80 (384.20, 476.35) |
| | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 747 | 565.58 (512.62, 624.02) |
| | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 234 | 648.88 (451.21, 933.14) |
| | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 234 | 16689.18 (12811.64, 21740.29) |
| | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 234 | 10741.38 (8558.81, 13480.53) |
| | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 234 | 1256.68 (1017.71, 1551.75) |
| | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 234 | 1561.17 (1336.08, 1824.18) |
| | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 138 | 0.05 (0.05, 0.05) |
| | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 138 | 0.80 (0.80, 0.80) |
| | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 138 | 0.15 (0.15, 0.15) |
| | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 138 | 1.25 (1.21, 1.28) |
| | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 138 | 7.54 (7.49, 7.58) |
| | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 241 | 133.24 (92.21, 192.52) |
| | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 241 | 3052.94 (2308.16, 4038.04) |
| | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 241 | 2310.36 (1764.78, 3024.62) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|------------------------|-----------------------|-----|----------------------------|
| | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 241 | 309.33 (255.18, 374.97) |
| | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 241 | 456.31 (389.81, 534.14) |

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 (BAU/ml) | 357 | 0.05 (0.05, 0.05) |
| Age < 65 | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 357 | 0.80 (0.80, 0.80) |
| Age < 65 | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 357 | 0.15 (0.15, 0.15) |
| Age < 65 | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 357 | 1.21 (1.21, 1.21) |
| Age < 65 | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 357 | 7.51 (7.51, 7.51) |
| Age < 65 | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 114 | 0.05 (0.05, 0.05) |
| Age < 65 | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 114 | 0.82 (0.79, 0.85) |
| Age < 65 | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 114 | 0.16 (0.15, 0.16) |
| Age < 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 114 | 1.71 (1.52, 1.93) |
| Age < 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 114 | 10.04 (8.96, 11.26) |
| Age < 65 | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 72 | 0.05 (0.05, 0.05) |
| Age < 65 | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 72 | 0.80 (0.80, 0.80) |
| Age < 65 | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 72 | 0.15 (0.15, 0.15) |
| Age < 65 | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 72 | 1.21 (1.21, 1.22) |
| Age < 65 | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 72 | 7.78 (7.49, 8.08) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------|--------|---------|---------------------|-------------------------|-----|----------------------------|
| Age < 65 | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 0.05 (0.05, 0.05) |
| Age < 65 | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 0.80 (0.80, 0.80) |
| Age < 65 | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 0.15 (0.15, 0.16) |
| Age < 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 1.63 (1.45, 1.84) |
| Age < 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 120 | 10.06 (9.08, 11.15) |
| Age < 65 | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 357 | 30.25 (24.33, 37.60) |
| Age < 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 357 | 356.86 (301.49, 422.39) |
| Age < 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 357 | 198.79 (173.81, 227.36) |
| Age < 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 357 | 15.24 (13.63, 17.04) |
| Age < 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 357 | 23.51 (21.31, 25.93) |
| Age < 65 | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 114 | 64.27 (45.66, 90.47) |
| Age < 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 114 | 617.21 (450.57, 845.49) |
| Age < 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 114 | 353.46 (285.77, 437.17) |
| Age < 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 114 | 28.61 (23.76, 34.45) |
| Age < 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 114 | 48.64 (41.15, 57.48) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age < 65 | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 72 | 0.05 (0.05, 0.05) |
| Age < 65 | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 72 | 0.80 (0.80, 0.80) |
| Age < 65 | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 72 | 0.15 (0.15, 0.15) |
| Age < 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 72 | 1.21 (1.21, 1.21) |
| Age < 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 72 | 7.51 (7.51, 7.51) |
| Age < 65 | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 20.88 (14.63, 29.80) |
| Age < 65 | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 224.00 (159.42, 314.74) |
| Age < 65 | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 126.14 (96.53, 164.83) |
| Age < 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 9.92 (8.08, 12.19) |
| Age < 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 120 | 18.92 (16.11, 22.22) |
| Age < 65 | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 357 | 123.20 (95.80, 158.44) |
| Age < 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 357 | 3345.62 (2777.00, 4030.66) |
| Age < 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 357 | 2364.92 (1992.88, 2806.42) |
| Age < 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 357 | 357.11 (312.83, 407.65) |
| Age < 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 357 | 512.86 (454.13, 579.18) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------|--------|---------|---------------------|-------------------------|-----|---------------------------------|
| Age < 65 | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 114 | 485.45 (311.29, 757.03) |
| Age < 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 114 | 12175.02 (8842.14, 16764.17) |
| Age < 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 114 | 8050.61 (6114.49, 10599.79) |
| Age < 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 114 | 1070.02 (826.48, 1385.33) |
| Age < 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 114 | 1439.55 (1191.48, 1739.25) |
| Age < 65 | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 72 | 0.05 (0.05, 0.05) |
| Age < 65 | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 72 | 0.80 (0.80, 0.80) |
| Age < 65 | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 72 | 0.15 (0.15, 0.15) |
| Age < 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 72 | 1.24 (1.20, 1.28) |
| Age < 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 72 | 7.51 (7.51, 7.51) |
| Age < 65 | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 102.01 (64.98, 160.15) |
| Age < 65 | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 2044.73 (1455.28, 2872.94) |
| Age < 65 | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 1588.46 (1142.67, 2208.16) |
| Age < 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 257.10 (203.12, 325.43) |
| Age < 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 120 | 416.45 (343.36, 505.10) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------|-------|---------|---------------------|-------------------------|-----|-----------------------|
| Age \geq 65 | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 390 | 0.05 (0.05, 0.05) |
| Age \geq 65 | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 390 | 0.80 (0.80, 0.80) |
| Age \geq 65 | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 390 | 0.15 (0.15, 0.15) |
| Age \geq 65 | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 390 | 1.21 (1.21, 1.21) |
| Age \geq 65 | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 390 | 7.51 (7.51, 7.51) |
| Age \geq 65 | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 120 | 0.05 (0.05, 0.05) |
| Age \geq 65 | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 120 | 0.80 (0.80, 0.80) |
| Age \geq 65 | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 120 | 0.15 (0.15, 0.15) |
| Age \geq 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 120 | 1.52 (1.37, 1.68) |
| Age \geq 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 120 | 9.24 (8.52, 10.03) |
| Age \geq 65 | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 66 | 0.05 (0.05, 0.05) |
| Age \geq 65 | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 66 | 0.80 (0.80, 0.80) |
| Age \geq 65 | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 66 | 0.15 (0.15, 0.15) |
| Age \geq 65 | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 66 | 1.21 (1.21, 1.21) |
| Age \geq 65 | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 66 | 7.57 (7.45, 7.70) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age \geq 65 | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 0.05 (0.05, 0.05) |
| Age \geq 65 | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 0.81 (0.79, 0.84) |
| Age \geq 65 | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 0.15 (0.15, 0.15) |
| Age \geq 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 1.66 (1.50, 1.84) |
| Age \geq 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 9.19 (8.36, 10.11) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 390 | 105.10 (88.47, 124.86) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 390 | 1392.43 (1200.78, 1614.67) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 390 | 799.13 (705.06, 905.76) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 390 | 28.34 (25.89, 31.02) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 390 | 37.82 (34.56, 41.37) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 120 | 209.19 (154.61, 283.03) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 120 | 2844.99 (2222.07, 3642.53) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 120 | 1489.36 (1223.39, 1813.16) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 120 | 54.90 (46.83, 64.36) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 120 | 62.63 (53.04, 73.97) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| Age ≥ 65 | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 66 | 0.05 (0.05, 0.05) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 66 | 0.80 (0.80, 0.80) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 66 | 0.15 (0.15, 0.15) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 66 | 1.23 (1.19, 1.28) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 66 | 7.51 (7.51, 7.51) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 76.19 (57.27, 101.36) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 982.84 (754.71, 1279.93) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 530.97 (437.49, 644.42) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 19.27 (16.61, 22.35) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 26.17 (22.51, 30.42) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 390 | 552.00 (447.81, 680.43) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 390 | 17811.61 (15012.46, 21132.68) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 390 | 12836.45 (11096.62, 14849.05) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 390 | 837.45 (743.98, 942.66) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 390 | 813.85 (734.70, 901.52) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| Age \geq 65 | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 120 | 2021.65 (1395.66, 2928.42) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 120 | 57390.09 (42425.39, 77633.31) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 120 | 33228.31 (25909.63, 42614.29) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 120 | 2358.86 (1909.82, 2913.48) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 120 | 2144.88 (1777.29, 2588.48) |
| Age \geq 65 | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 66 | 0.05 (0.05, 0.05) |
| Age \geq 65 | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 66 | 0.80 (0.80, 0.80) |
| Age \geq 65 | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 66 | 0.15 (0.15, 0.15) |
| Age \geq 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 66 | 1.26 (1.20, 1.33) |
| Age \geq 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 66 | 7.61 (7.41, 7.81) |
| Age \geq 65 | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 372.41 (252.92, 548.36) |
| Age \geq 65 | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 14281.73 (10842.90, 18811.19) |
| Age \geq 65 | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 9771.25 (7721.56, 12365.03) |
| Age \geq 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 630.33 (519.76, 764.44) |
| Age \geq 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 648.67 (547.29, 768.82) |

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 (BAU/ml) | 381 | 0.05 (0.05, 0.05) |
| At-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 381 | 0.80 (0.80, 0.80) |
| At-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 381 | 0.15 (0.15, 0.15) |
| At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 381 | 1.21 (1.21, 1.21) |
| At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 381 | 7.51 (7.51, 7.51) |
| At-risk | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 111 | 0.05 (0.05, 0.05) |
| At-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 111 | 0.82 (0.77, 0.88) |
| At-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 111 | 0.15 (0.15, 0.15) |
| At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 111 | 1.57 (1.40, 1.76) |
| At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 111 | 9.36 (8.35, 10.48) |
| At-risk | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 71 | 0.05 (0.05, 0.05) |
| At-risk | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 71 | 0.80 (0.80, 0.80) |
| At-risk | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 71 | 0.15 (0.15, 0.15) |
| At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 71 | 1.22 (1.20, 1.24) |
| At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 71 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------|--------|---------|---------------------|-------------------------|-----|-----------------------------|
| At-risk | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 117 | 0.05 (0.05, 0.05) |
| At-risk | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 117 | 0.80 (0.79, 0.81) |
| At-risk | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 117 | 0.16 (0.15, 0.16) |
| At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 117 | 1.53 (1.38, 1.69) |
| At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 117 | 10.00 (8.97, 11.14) |
| At-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 381 | 40.32 (33.02, 49.23) |
| At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 381 | 516.91 (434.48, 614.97) |
| At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 381 | 294.81 (255.35, 340.37) |
| At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 381 | 18.02 (16.26, 19.98) |
| At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 381 | 27.52 (24.95, 30.36) |
| At-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 111 | 72.75 (49.40, 107.15) |
| At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 111 | 875.73 (634.67, 1208.35) |
| At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 111 | 577.86 (452.58, 737.83) |
| At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 111 | 32.53 (26.65, 39.71) |
| At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 111 | 49.96 (40.47, 61.68) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| At-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 71 | 0.05 (0.05, 0.05) |
| At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 71 | 0.80 (0.80, 0.80) |
| At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 71 | 0.15 (0.15, 0.15) |
| At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 71 | 1.22 (1.20, 1.25) |
| At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 71 | 7.51 (7.51, 7.51) |
| At-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 117 | 39.07 (27.06, 56.40) |
| At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 117 | 399.73 (291.24, 548.63) |
| At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 117 | 230.58 (178.83, 297.31) |
| At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 117 | 13.89 (11.24, 17.17) |
| At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 117 | 21.72 (18.34, 25.72) |
| At-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 381 | 175.84 (138.12, 223.86) |
| At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 381 | 5606.18 (4585.35, 6854.28) |
| At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 381 | 3919.84 (3269.77, 4699.17) |
| At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 381 | 468.02 (411.38, 532.45) |
| At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 381 | 614.23 (547.72, 688.82) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| At-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 111 | 681.83 (436.93, 1064.01) |
| At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 111 | 15742.11 (11096.03, 22333.56) |
| At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 111 | 12327.67 (9020.42, 16847.51) |
| At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 111 | 1375.89 (1057.21, 1790.64) |
| At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 111 | 1593.34 (1280.14, 1983.16) |
| At-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 71 | 0.05 (0.05, 0.05) |
| At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 71 | 0.80 (0.80, 0.80) |
| At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 71 | 0.15 (0.15, 0.15) |
| At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 71 | 1.26 (1.19, 1.35) |
| At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 71 | 7.51 (7.51, 7.51) |
| At-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 117 | 191.20 (125.62, 291.02) |
| At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 117 | 4423.09 (3257.84, 6005.14) |
| At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 117 | 3158.86 (2281.20, 4374.18) |
| At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 117 | 351.46 (273.50, 451.64) |
| At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 117 | 399.37 (320.90, 497.03) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------------|-------|---------|---------------------|-------------------------|-----|------------------------|
| Not at-risk | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 366 | 0.05 (0.05, 0.05) |
| Not at-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 366 | 0.80 (0.80, 0.80) |
| Not at-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 366 | 0.15 (0.15, 0.15) |
| Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 366 | 1.21 (1.21, 1.21) |
| Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 366 | 7.51 (7.51, 7.51) |
| Not at-risk | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 123 | 0.05 (0.05, 0.05) |
| Not at-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 123 | 0.81 (0.79, 0.83) |
| Not at-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 123 | 0.16 (0.15, 0.16) |
| Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 123 | 1.73 (1.50, 1.98) |
| Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 123 | 10.17 (8.94, 11.58) |
| Not at-risk | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 67 | 0.05 (0.05, 0.05) |
| Not at-risk | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 67 | 0.80 (0.80, 0.80) |
| Not at-risk | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 67 | 0.15 (0.15, 0.15) |
| Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 67 | 1.21 (1.21, 1.21) |
| Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 67 | 7.86 (7.50, 8.23) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------------|--------|---------|---------------------|-------------------------|-----|-----------------------------|
| Not at-risk | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 124 | 0.05 (0.05, 0.05) |
| Not at-risk | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 124 | 0.80 (0.79, 0.81) |
| Not at-risk | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 124 | 0.15 (0.15, 0.15) |
| Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 124 | 1.70 (1.48, 1.96) |
| Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 124 | 9.81 (8.74, 11.01) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 366 | 38.84 (30.11, 50.10) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 366 | 453.52 (373.62, 550.49) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 366 | 251.64 (215.64, 293.64) |
| Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 366 | 17.01 (14.92, 19.38) |
| Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 366 | 25.13 (22.44, 28.14) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 123 | 87.15 (59.57, 127.48) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 123 | 824.18 (574.54, 1182.28) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 123 | 424.06 (333.14, 539.80) |
| Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 123 | 32.75 (26.56, 40.38) |
| Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 123 | 51.91 (43.40, 62.08) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 67 | 0.05 (0.05, 0.05) |
| Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 67 | 0.80 (0.80, 0.80) |
| Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 67 | 0.15 (0.15, 0.15) |
| Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 67 | 1.21 (1.21, 1.21) |
| Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 67 | 7.51 (7.51, 7.51) |
| Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 124 | 22.29 (14.89, 33.35) |
| Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 124 | 260.53 (175.30, 387.19) |
| Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 124 | 142.82 (104.63, 194.96) |
| Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 124 | 10.17 (8.07, 12.83) |
| Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 124 | 19.43 (16.19, 23.32) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 366 | 165.51 (123.58, 221.68) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 366 | 4330.32 (3501.86, 5354.77) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 366 | 3101.15 (2549.75, 3771.78) |
| Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 366 | 405.51 (347.62, 473.04) |
| Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 366 | 538.46 (467.44, 620.28) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 123 | 631.28 (379.42, 1050.35) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 123 | 17239.12 (11977.96, 24811.18) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 123 | 9950.91 (7303.49, 13557.98) |
| Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 123 | 1195.03 (890.64, 1603.47) |
| Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 123 | 1543.60 (1251.74, 1903.51) |
| Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 67 | 0.05 (0.05, 0.05) |
| Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 67 | 0.80 (0.80, 0.80) |
| Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 67 | 0.15 (0.15, 0.15) |
| Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 67 | 1.23 (1.20, 1.27) |
| Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 67 | 7.55 (7.47, 7.63) |
| Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 124 | 108.79 (64.41, 183.76) |
| Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 124 | 2479.40 (1657.15, 3709.64) |
| Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 124 | 1938.34 (1324.99, 2835.62) |
| Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 124 | 287.94 (220.69, 375.68) |
| Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 124 | 491.75 (397.36, 608.56) |

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 (BAU/ml) | 185 | 0.05 (0.05, 0.05) |
| Age < 65 At-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 185 | 0.80 (0.80, 0.80) |
| Age < 65 At-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 185 | 0.15 (0.15, 0.15) |
| Age < 65 At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 185 | 1.21 (1.21, 1.21) |
| Age < 65 At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 185 | 7.51 (7.51, 7.51) |
| Age < 65 At-risk | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 0.05 (0.05, 0.05) |
| Age < 65 At-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 0.83 (0.76, 0.91) |
| Age < 65 At-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 0.15 (0.15, 0.15) |
| Age < 65 At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 1.59 (1.38, 1.84) |
| Age < 65 At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 56 | 9.39 (8.08, 10.90) |
| Age < 65 At-risk | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0.05 (0.05, 0.05) |
| Age < 65 At-risk | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0.80 (0.80, 0.80) |
| Age < 65 At-risk | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0.15 (0.15, 0.15) |
| Age < 65 At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 36 | 1.22 (1.20, 1.25) |
| Age < 65 At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 36 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|------------------|--------|---------|---------------------|-------------------------|-----|----------------------------|
| Age < 65 At-risk | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 59 | 0.05 (0.05, 0.05) |
| Age < 65 At-risk | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 59 | 0.80 (0.80, 0.80) |
| Age < 65 At-risk | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 59 | 0.16 (0.15, 0.16) |
| Age < 65 At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 59 | 1.48 (1.30, 1.69) |
| Age < 65 At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 59 | 10.31 (8.97, 11.86) |
| Age < 65 At-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 185 | 27.71 (21.41, 35.84) |
| Age < 65 At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 185 | 349.87 (279.45, 438.03) |
| Age < 65 At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 185 | 199.73 (166.21, 240.01) |
| Age < 65 At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 185 | 15.18 (13.27, 17.35) |
| Age < 65 At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 185 | 24.27 (21.38, 27.56) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 48.62 (29.53, 80.04) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 555.52 (371.70, 830.23) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 381.68 (284.39, 512.26) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 26.59 (20.62, 34.29) |
| Age < 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 56 | 43.84 (33.39, 57.55) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age < 65 At-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0.05 (0.05, 0.05) |
| Age < 65 At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0.80 (0.80, 0.80) |
| Age < 65 At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0.15 (0.15, 0.15) |
| Age < 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 36 | 1.21 (1.21, 1.21) |
| Age < 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 36 | 7.51 (7.51, 7.51) |
| Age < 65 At-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 59 | 30.34 (18.77, 49.04) |
| Age < 65 At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 59 | 290.24 (193.43, 435.51) |
| Age < 65 At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 59 | 163.09 (117.48, 226.43) |
| Age < 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 59 | 12.23 (9.23, 16.21) |
| Age < 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 59 | 21.07 (16.95, 26.19) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 185 | 114.61 (83.79, 156.78) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 185 | 3684.93 (2839.16, 4782.66) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 185 | 2411.71 (1908.81, 3047.12) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 185 | 368.01 (311.75, 434.43) |
| Age < 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 185 | 555.98 (479.07, 645.23) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|------------------|--------|---------|---------------------|-------------------------|----|--------------------------------|
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 411.63 (236.09, 717.69) |
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 9098.59 (5981.40, 13840.28) |
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 8014.18 (5452.45, 11779.48) |
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 1047.93 (752.94, 1458.49) |
| Age < 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 56 | 1411.41 (1070.84, 1860.31) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0.05 (0.05, 0.05) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0.80 (0.80, 0.80) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0.15 (0.15, 0.15) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 36 | 1.26 (1.16, 1.37) |
| Age < 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 36 | 7.51 (7.51, 7.51) |
| Age < 65 At-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 59 | 160.93 (92.55, 279.82) |
| Age < 65 At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 59 | 2810.16 (1910.33, 4133.85) |
| Age < 65 At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 59 | 2081.83 (1367.84, 3168.51) |
| Age < 65 At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 59 | 289.96 (209.02, 402.23) |
| Age < 65 At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 59 | 335.47 (251.88, 446.80) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|-------|---------|---------------------|-------------------------|-----|------------------------|
| Age < 65 Not at-risk | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 172 | 0.05 (0.05, 0.05) |
| Age < 65 Not at-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 172 | 0.80 (0.80, 0.80) |
| Age < 65 Not at-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 172 | 0.15 (0.15, 0.15) |
| Age < 65 Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 172 | 1.21 (1.21, 1.21) |
| Age < 65 Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 172 | 7.51 (7.51, 7.51) |
| Age < 65 Not at-risk | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) |
| Age < 65 Not at-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.81 (0.78, 0.84) |
| Age < 65 Not at-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.16 (0.15, 0.16) |
| Age < 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 1.77 (1.50, 2.09) |
| Age < 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 58 | 10.38 (8.90, 12.09) |
| Age < 65 Not at-risk | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0.05 (0.05, 0.05) |
| Age < 65 Not at-risk | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0.80 (0.80, 0.80) |
| Age < 65 Not at-risk | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0.15 (0.15, 0.15) |
| Age < 65 Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 36 | 1.21 (1.21, 1.21) |
| Age < 65 Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 36 | 7.91 (7.47, 8.38) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|--------|---------|---------------------|-------------------------|-----|----------------------------|
| Age < 65 Not at-risk | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 61 | 0.05 (0.05, 0.05) |
| Age < 65 Not at-risk | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 61 | 0.80 (0.80, 0.80) |
| Age < 65 Not at-risk | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 61 | 0.15 (0.15, 0.15) |
| Age < 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 61 | 1.71 (1.45, 2.02) |
| Age < 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 61 | 9.94 (8.67, 11.39) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 172 | 31.64 (23.41, 42.76) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 172 | 360.49 (287.17, 452.52) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 172 | 198.32 (165.67, 237.39) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 172 | 15.27 (13.08, 17.82) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 172 | 23.12 (20.24, 26.42) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 73.59 (47.11, 114.95) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 649.55 (424.79, 993.24) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 340.53 (256.98, 451.24) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 29.65 (23.17, 37.94) |
| Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 58 | 51.15 (41.46, 63.11) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0.05 (0.05, 0.05) |
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0.80 (0.80, 0.80) |
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0.15 (0.15, 0.15) |
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 36 | 1.21 (1.21, 1.21) |
| Age < 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 36 | 7.51 (7.51, 7.51) |
| Age < 65 Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 61 | 17.42 (10.85, 27.95) |
| Age < 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 61 | 197.51 (124.06, 314.42) |
| Age < 65 Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 61 | 111.34 (77.39, 160.17) |
| Age < 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 61 | 8.97 (6.83, 11.78) |
| Age < 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 61 | 17.95 (14.49, 22.24) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 172 | 127.83 (90.56, 180.44) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 172 | 3184.52 (2485.29, 4080.48) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 172 | 2341.37 (1861.50, 2944.94) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 172 | 351.66 (293.40, 421.50) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 172 | 492.14 (416.35, 581.73) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|--------|---------|---------------------|-------------------------|----|---------------------------------|
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 525.87 (287.99, 960.23) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 14021.90 (9132.45, 21529.13) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 8068.33 (5610.64, 11602.60) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 1080.90 (762.94, 1531.39) |
| Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 58 | 1453.39 (1135.47, 1860.32) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 0.05 (0.05, 0.05) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 36 | 0.80 (0.80, 0.80) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 36 | 0.15 (0.15, 0.15) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 36 | 1.23 (1.19, 1.26) |
| Age < 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 36 | 7.51 (7.51, 7.51) |
| Age < 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 61 | 81.75 (44.28, 150.91) |
| Age < 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 61 | 1752.03 (1096.43, 2799.64) |
| Age < 65 Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 61 | 1392.85 (893.03, 2172.39) |
| Age < 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 61 | 242.51 (177.54, 331.27) |
| Age < 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 61 | 462.59 (360.18, 594.12) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|------------------|-------|---------|---------------------|-------------------------|-----|-----------------------|
| Age ≥ 65 At-risk | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 0.05 (0.05, 0.05) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 0.80 (0.80, 0.80) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 0.15 (0.15, 0.15) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 1.21 (1.21, 1.21) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 196 | 7.51 (7.51, 7.51) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 55 | 0.05 (0.05, 0.06) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 55 | 0.80 (0.80, 0.80) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 55 | 0.15 (0.15, 0.15) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 55 | 1.52 (1.31, 1.76) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 55 | 9.28 (8.27, 10.42) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0.05 (0.05, 0.05) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0.80 (0.80, 0.80) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0.15 (0.15, 0.15) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 35 | 1.21 (1.21, 1.21) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 35 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age ≥ 65 At-risk | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.81 (0.78, 0.84) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.66 (1.45, 1.91) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 9.22 (8.01, 10.60) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 102.84 (80.14, 131.98) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 1369.34 (1115.31, 1681.23) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 779.20 (655.36, 926.44) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 27.69 (24.44, 31.37) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 196 | 37.65 (33.10, 42.82) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 55 | 215.03 (142.79, 323.81) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 55 | 2977.08 (2034.61, 4356.13) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 55 | 1762.27 (1275.34, 2435.10) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 55 | 55.95 (44.23, 70.77) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 55 | 71.03 (55.54, 90.85) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|------------------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0.05 (0.05, 0.05) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0.80 (0.80, 0.80) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0.15 (0.15, 0.15) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 35 | 1.25 (1.17, 1.34) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 35 | 7.51 (7.51, 7.51) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 75.35 (50.45, 112.55) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 917.85 (629.03, 1339.28) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 566.74 (445.20, 721.46) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 19.34 (15.80, 23.67) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 23.52 (18.82, 29.40) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 511.75 (381.45, 686.55) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 15978.46 (12608.12, 20249.74) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 13176.09 (10726.24, 16185.49) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 852.81 (723.19, 1005.66) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 196 | 787.68 (679.83, 912.64) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|------------------|--------|---------|---------------------|-------------------------|----|-----------------------------------|
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 55 | 2647.77 (1480.53, 4735.25) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 55 | 68728.43 (41689.06, 113305.43) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 55 | 39234.47 (25954.09, 59310.24) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 55 | 2860.83 (2021.86, 4047.93) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 55 | 2207.30 (1624.62, 2998.97) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0.05 (0.05, 0.05) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0.80 (0.80, 0.80) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0.15 (0.15, 0.15) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 35 | 1.27 (1.16, 1.38) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 35 | 7.51 (7.51, 7.51) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 299.14 (189.84, 471.35) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 14365.55 (10202.75, 20226.80) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 9328.48 (6731.41, 12927.52) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 579.22 (440.09, 762.33) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 628.10 (499.76, 789.42) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|-------|---------|---------------------|-------------------------|-----|-----------------------|
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 0.05 (0.05, 0.05) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 0.80 (0.80, 0.80) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 1.21 (1.21, 1.21) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 194 | 7.51 (7.51, 7.51) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 65 | 0.05 (0.05, 0.05) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 65 | 0.80 (0.80, 0.80) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 65 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 65 | 1.52 (1.33, 1.74) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 65 | 9.20 (8.20, 10.32) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0.05 (0.05, 0.05) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0.80 (0.80, 0.80) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 31 | 1.21 (1.21, 1.21) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 31 | 7.64 (7.39, 7.91) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.06) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 0.82 (0.78, 0.85) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 1.66 (1.43, 1.93) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 9.17 (8.05, 10.44) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 107.45 (84.75, 136.23) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 1416.27 (1143.81, 1753.62) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 819.89 (684.18, 982.51) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 29.02 (25.46, 33.07) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 194 | 37.98 (33.51, 43.06) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 65 | 204.03 (131.17, 317.36) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 65 | 2730.22 (1984.51, 3756.13) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 65 | 1278.50 (1021.04, 1600.88) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 65 | 53.97 (43.52, 66.93) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 65 | 55.87 (44.81, 69.67) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0.05 (0.05, 0.05) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0.80 (0.80, 0.80) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 31 | 1.21 (1.21, 1.21) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 31 | 7.51 (7.51, 7.51) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 76.98 (51.40, 115.29) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 1048.16 (725.71, 1513.87) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 499.40 (370.25, 673.59) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 19.21 (15.49, 23.82) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 28.92 (23.76, 35.22) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 596.10 (442.78, 802.51) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 19887.87 (15555.85, 25426.29) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 12500.59 (10172.50, 15361.49) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 822.13 (693.64, 974.43) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 194 | 841.31 (730.05, 969.52) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|--------|---------|---------------------|-------------------------|----|----------------------------------|
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 65 | 1582.67 (1000.64, 2503.23) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 65 | 48729.63 (34487.01, 68854.24) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 65 | 28578.23 (21460.52, 38056.65) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 65 | 1980.05 (1553.05, 2524.44) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 65 | 2089.76 (1666.22, 2620.97) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0.05 (0.05, 0.05) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0.80 (0.80, 0.80) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 31 | 1.26 (1.19, 1.33) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 31 | 7.72 (7.31, 8.16) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 457.63 (248.51, 842.70) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 14203.36 (9280.26, 21738.13) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 10206.80 (7288.69, 14293.21) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 682.51 (521.47, 893.29) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 668.62 (520.90, 858.23) |

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 (BAU/ml) | 320 | 0.05 (0.05, 0.05) |
| Male | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 320 | 0.80 (0.80, 0.80) |
| Male | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 320 | 0.15 (0.15, 0.15) |
| Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 320 | 1.21 (1.21, 1.21) |
| Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 320 | 7.51 (7.51, 7.51) |
| Male | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 95 | 0.05 (0.05, 0.05) |
| Male | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 95 | 0.80 (0.80, 0.80) |
| Male | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 95 | 0.16 (0.15, 0.16) |
| Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 95 | 1.67 (1.45, 1.92) |
| Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 95 | 9.61 (8.30, 11.12) |
| Male | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.05) |
| Male | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) |
| Male | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| Male | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 1.21 (1.21, 1.21) |
| Male | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.78 (7.40, 8.18) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|-----|-----------------------------|
| Male | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 108 | 0.05 (0.05, 0.05) |
| Male | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 108 | 0.80 (0.79, 0.81) |
| Male | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 108 | 0.15 (0.15, 0.15) |
| Male | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 108 | 1.44 (1.30, 1.59) |
| Male | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 108 | 10.11 (9.02, 11.34) |
| Male | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 320 | 38.15 (28.53, 51.02) |
| Male | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 320 | 457.64 (371.12, 564.33) |
| Male | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 320 | 252.49 (212.53, 299.95) |
| Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 320 | 17.10 (14.87, 19.67) |
| Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 320 | 25.48 (22.40, 29.00) |
| Male | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 95 | 78.94 (50.06, 124.47) |
| Male | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 95 | 664.48 (437.18, 1009.94) |
| Male | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 95 | 438.29 (330.76, 580.78) |
| Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 95 | 29.52 (22.97, 37.93) |
| Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 95 | 46.32 (37.37, 57.41) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Male | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.05) |
| Male | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) |
| Male | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| Male | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 1.21 (1.21, 1.21) |
| Male | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) |
| Male | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 108 | 23.92 (14.87, 38.48) |
| Male | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 108 | 298.61 (197.76, 450.90) |
| Male | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 108 | 173.03 (122.78, 243.83) |
| Male | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 108 | 10.66 (8.22, 13.83) |
| Male | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 108 | 19.86 (16.26, 24.24) |
| Male | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 320 | 178.15 (128.55, 246.88) |
| Male | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 320 | 4244.31 (3392.29, 5310.33) |
| Male | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 320 | 3437.26 (2774.16, 4258.86) |
| Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 320 | 441.92 (376.96, 518.07) |
| Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 320 | 544.29 (469.26, 631.32) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| Male | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 95 | 556.97 (327.90, 946.06) |
| Male | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 95 | 15154.35 (10160.04, 22603.69) |
| Male | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 95 | 10123.18 (7262.75, 14110.20) |
| Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 95 | 1249.39 (877.99, 1777.91) |
| Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 95 | 1549.68 (1188.99, 2019.79) |
| Male | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.05) |
| Male | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) |
| Male | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| Male | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 1.23 (1.19, 1.27) |
| Male | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) |
| Male | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 108 | 107.97 (60.07, 194.08) |
| Male | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 108 | 2584.72 (1697.12, 3936.53) |
| Male | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 108 | 2423.64 (1588.60, 3697.60) |
| Male | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 108 | 270.04 (197.13, 369.92) |
| Male | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 108 | 428.33 (338.81, 541.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------|-------|---------|---------------------|-------------------------|-----|------------------------|
| Female | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 427 | 0.05 (0.05, 0.05) |
| Female | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 427 | 0.80 (0.80, 0.80) |
| Female | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 427 | 0.15 (0.15, 0.15) |
| Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 427 | 1.21 (1.21, 1.21) |
| Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 427 | 7.51 (7.51, 7.51) |
| Female | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 139 | 0.05 (0.05, 0.05) |
| Female | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 139 | 0.83 (0.79, 0.87) |
| Female | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 139 | 0.16 (0.15, 0.16) |
| Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 139 | 1.67 (1.46, 1.91) |
| Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 139 | 10.07 (8.92, 11.36) |
| Female | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0.05 (0.05, 0.05) |
| Female | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0.80 (0.80, 0.80) |
| Female | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0.15 (0.15, 0.15) |
| Female | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 75 | 1.22 (1.20, 1.23) |
| Female | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 75 | 7.67 (7.41, 7.94) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------|--------|---------|---------------------|-------------------------|-----|-----------------------------|
| Female | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 133 | 0.05 (0.05, 0.05) |
| Female | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 133 | 0.80 (0.79, 0.81) |
| Female | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 133 | 0.15 (0.15, 0.16) |
| Female | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 133 | 1.82 (1.57, 2.10) |
| Female | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 133 | 9.69 (8.59, 10.92) |
| Female | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 427 | 40.32 (32.34, 50.27) |
| Female | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 427 | 490.45 (407.20, 590.72) |
| Female | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 427 | 278.21 (240.00, 322.50) |
| Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 427 | 17.59 (15.59, 19.83) |
| Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 427 | 26.38 (23.82, 29.22) |
| Female | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 139 | 83.72 (58.61, 119.58) |
| Female | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 139 | 995.38 (720.00, 1376.06) |
| Female | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 139 | 500.15 (395.47, 632.53) |
| Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 139 | 35.09 (29.05, 42.38) |
| Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 139 | 54.95 (46.08, 65.54) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Female | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0.05 (0.05, 0.05) |
| Female | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0.80 (0.80, 0.80) |
| Female | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0.15 (0.15, 0.15) |
| Female | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 75 | 1.22 (1.20, 1.24) |
| Female | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 75 | 7.51 (7.51, 7.51) |
| Female | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 133 | 30.29 (21.02, 43.65) |
| Female | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 133 | 308.16 (209.13, 454.08) |
| Female | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 133 | 167.01 (124.57, 223.90) |
| Female | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 133 | 11.99 (9.61, 14.96) |
| Female | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 133 | 20.53 (17.22, 24.47) |
| Female | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 427 | 163.03 (125.40, 211.94) |
| Female | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 427 | 5197.76 (4204.66, 6425.43) |
| Female | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 427 | 3345.99 (2766.97, 4046.17) |
| Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 427 | 417.64 (359.94, 484.59) |
| Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 427 | 581.88 (509.61, 664.40) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| Female | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 139 | 722.64 (442.21, 1180.89) |
| Female | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 139 | 17863.54 (12513.50, 25500.93) |
| Female | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 139 | 11199.68 (8160.35, 15371.03) |
| Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 139 | 1261.83 (970.99, 1639.79) |
| Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 139 | 1569.32 (1298.20, 1897.06) |
| Female | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0.05 (0.05, 0.05) |
| Female | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0.80 (0.80, 0.80) |
| Female | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0.15 (0.15, 0.15) |
| Female | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 75 | 1.26 (1.20, 1.32) |
| Female | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 75 | 7.56 (7.46, 7.65) |
| Female | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 133 | 157.75 (98.56, 252.50) |
| Female | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 133 | 3489.69 (2373.53, 5130.73) |
| Female | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 133 | 2223.24 (1551.15, 3186.52) |
| Female | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 133 | 344.99 (271.92, 437.69) |
| Female | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 133 | 480.09 (387.71, 594.47) |

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 (BAU/ml) | 201 | 0.05 (0.05, 0.05) |
| Age < 65 Female | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 201 | 0.80 (0.80, 0.80) |
| Age < 65 Female | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 201 | 0.15 (0.15, 0.15) |
| Age < 65 Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 201 | 1.21 (1.21, 1.21) |
| Age < 65 Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 201 | 7.51 (7.51, 7.51) |
| Age < 65 Female | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 66 | 0.05 (0.05, 0.05) |
| Age < 65 Female | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 66 | 0.83 (0.78, 0.89) |
| Age < 65 Female | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 66 | 0.16 (0.15, 0.16) |
| Age < 65 Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 66 | 1.74 (1.47, 2.05) |
| Age < 65 Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 66 | 10.17 (8.75, 11.82) |
| Age < 65 Female | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 38 | 0.05 (0.05, 0.05) |
| Age < 65 Female | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 38 | 0.80 (0.80, 0.80) |
| Age < 65 Female | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 38 | 0.15 (0.15, 0.15) |
| Age < 65 Female | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 38 | 1.22 (1.20, 1.24) |
| Age < 65 Female | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 38 | 7.69 (7.34, 8.05) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------|--------|---------|---------------------|-------------------------|-----|-----------------------------|
| Age < 65 Female | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 70 | 0.05 (0.05, 0.05) |
| Age < 65 Female | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 70 | 0.80 (0.80, 0.80) |
| Age < 65 Female | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 70 | 0.16 (0.15, 0.16) |
| Age < 65 Female | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 70 | 1.83 (1.53, 2.19) |
| Age < 65 Female | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 70 | 9.83 (8.50, 11.37) |
| Age < 65 Female | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 201 | 30.87 (23.53, 40.49) |
| Age < 65 Female | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 201 | 370.15 (294.84, 464.71) |
| Age < 65 Female | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 201 | 207.80 (174.00, 248.17) |
| Age < 65 Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 201 | 15.29 (13.18, 17.74) |
| Age < 65 Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 201 | 23.80 (21.00, 26.98) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 66 | 68.33 (44.04, 106.00) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 66 | 779.97 (523.98, 1161.03) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 66 | 372.63 (282.08, 492.26) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 66 | 31.92 (25.29, 40.27) |
| Age < 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 66 | 52.30 (42.19, 64.83) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age < 65 Female | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 38 | 0.05 (0.05, 0.05) |
| Age < 65 Female | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 38 | 0.80 (0.80, 0.80) |
| Age < 65 Female | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 38 | 0.15 (0.15, 0.15) |
| Age < 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 38 | 1.21 (1.21, 1.21) |
| Age < 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 38 | 7.51 (7.51, 7.51) |
| Age < 65 Female | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 70 | 24.29 (15.68, 37.64) |
| Age < 65 Female | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 70 | 235.96 (148.54, 374.83) |
| Age < 65 Female | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 70 | 125.69 (88.81, 177.88) |
| Age < 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 70 | 10.61 (8.12, 13.85) |
| Age < 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 70 | 19.31 (15.62, 23.87) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 201 | 114.73 (83.20, 158.20) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 201 | 3714.56 (2870.02, 4807.62) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 201 | 2331.29 (1851.47, 2935.44) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 201 | 344.75 (287.42, 413.53) |
| Age < 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 201 | 522.37 (443.42, 615.38) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------|--------|---------|---------------------|-------------------------|----|---------------------------------|
| Age < 65 Female | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 66 | 573.17 (312.85, 1050.10) |
| Age < 65 Female | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 66 | 13231.73 (8582.30, 20399.99) |
| Age < 65 Female | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 66 | 8410.23 (5726.22, 12352.28) |
| Age < 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 66 | 1072.88 (778.33, 1478.90) |
| Age < 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 66 | 1433.60 (1138.13, 1805.77) |
| Age < 65 Female | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 38 | 0.05 (0.05, 0.05) |
| Age < 65 Female | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 38 | 0.80 (0.80, 0.80) |
| Age < 65 Female | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 38 | 0.15 (0.15, 0.15) |
| Age < 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 38 | 1.25 (1.18, 1.32) |
| Age < 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 38 | 7.51 (7.51, 7.51) |
| Age < 65 Female | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 70 | 125.93 (71.58, 221.53) |
| Age < 65 Female | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 70 | 2496.01 (1579.81, 3943.57) |
| Age < 65 Female | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 70 | 1564.76 (1020.53, 2399.22) |
| Age < 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 70 | 294.59 (221.56, 391.68) |
| Age < 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 70 | 441.33 (340.60, 571.85) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------|-------|---------|---------------------|-------------------------|-----|-----------------------|
| Age < 65 Male | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 156 | 0.05 (0.05, 0.05) |
| Age < 65 Male | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 156 | 0.80 (0.80, 0.80) |
| Age < 65 Male | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 156 | 0.15 (0.15, 0.15) |
| Age < 65 Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 156 | 1.21 (1.21, 1.21) |
| Age < 65 Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 156 | 7.51 (7.51, 7.51) |
| Age < 65 Male | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 48 | 0.05 (0.05, 0.05) |
| Age < 65 Male | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 48 | 0.80 (0.80, 0.80) |
| Age < 65 Male | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 48 | 0.16 (0.15, 0.16) |
| Age < 65 Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 48 | 1.68 (1.42, 1.98) |
| Age < 65 Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 48 | 9.87 (8.25, 11.81) |
| Age < 65 Male | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 34 | 0.05 (0.05, 0.05) |
| Age < 65 Male | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 34 | 0.80 (0.80, 0.80) |
| Age < 65 Male | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 34 | 0.15 (0.15, 0.15) |
| Age < 65 Male | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 34 | 1.21 (1.21, 1.21) |
| Age < 65 Male | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 34 | 7.86 (7.37, 8.38) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------|--------|---------|---------------------|-------------------------|-----|----------------------------|
| Age < 65 Male | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 50 | 0.05 (0.05, 0.05) |
| Age < 65 Male | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 50 | 0.80 (0.80, 0.80) |
| Age < 65 Male | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 50 | 0.15 (0.15, 0.15) |
| Age < 65 Male | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 50 | 1.41 (1.24, 1.60) |
| Age < 65 Male | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 50 | 10.36 (9.00, 11.93) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 156 | 29.43 (20.59, 42.07) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 156 | 339.74 (264.28, 436.75) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 156 | 187.30 (152.65, 229.82) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 156 | 15.17 (12.78, 18.00) |
| Age < 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 156 | 23.11 (19.75, 27.04) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 48 | 59.00 (34.31, 101.47) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 48 | 444.98 (273.94, 722.80) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 48 | 328.29 (237.15, 454.44) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 48 | 24.56 (18.23, 33.09) |
| Age < 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 48 | 43.94 (33.90, 56.95) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age < 65 Male | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 34 | 0.05 (0.05, 0.05) |
| Age < 65 Male | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 34 | 0.80 (0.80, 0.80) |
| Age < 65 Male | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 34 | 0.15 (0.15, 0.15) |
| Age < 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 34 | 1.21 (1.21, 1.21) |
| Age < 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 34 | 7.51 (7.51, 7.51) |
| Age < 65 Male | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 50 | 17.18 (9.56, 30.90) |
| Age < 65 Male | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 50 | 209.48 (126.34, 347.35) |
| Age < 65 Male | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 50 | 126.72 (83.31, 192.75) |
| Age < 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 50 | 9.11 (6.59, 12.58) |
| Age < 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 50 | 18.42 (14.40, 23.56) |
| Age < 65 Male | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 156 | 135.59 (90.77, 202.55) |
| Age < 65 Male | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 156 | 2906.70 (2231.61, 3786.02) |
| Age < 65 Male | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 156 | 2410.90 (1867.20, 3112.93) |
| Age < 65 Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 156 | 374.41 (308.74, 454.06) |
| Age < 65 Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 156 | 500.34 (417.13, 600.16) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------|--------|---------|---------------------|-------------------------|----|---------------------------------|
| Age < 65 Male | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 48 | 384.85 (204.57, 724.01) |
| Age < 65 Male | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 48 | 10837.65 (6781.54, 17319.77) |
| Age < 65 Male | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 48 | 7573.48 (5159.23, 11117.48) |
| Age < 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 48 | 1066.04 (695.25, 1634.57) |
| Age < 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 48 | 1447.90 (1051.53, 1993.70) |
| Age < 65 Male | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 34 | 0.05 (0.05, 0.05) |
| Age < 65 Male | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 34 | 0.80 (0.80, 0.80) |
| Age < 65 Male | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 34 | 0.15 (0.15, 0.15) |
| Age < 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 34 | 1.23 (1.19, 1.28) |
| Age < 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 34 | 7.51 (7.51, 7.51) |
| Age < 65 Male | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 50 | 77.78 (37.60, 160.89) |
| Age < 65 Male | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 50 | 1581.64 (956.49, 2615.38) |
| Age < 65 Male | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 50 | 1619.50 (968.96, 2706.81) |
| Age < 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 50 | 215.77 (146.34, 318.14) |
| Age < 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 50 | 386.48 (288.77, 517.25) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------|-------|---------|---------------------|-------------------------|-----|-----------------------|
| Age ≥ 65 Female | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 226 | 0.05 (0.05, 0.05) |
| Age ≥ 65 Female | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 226 | 0.80 (0.80, 0.80) |
| Age ≥ 65 Female | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 226 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 226 | 1.21 (1.21, 1.21) |
| Age ≥ 65 Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 226 | 7.51 (7.51, 7.51) |
| Age ≥ 65 Female | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 73 | 0.05 (0.05, 0.05) |
| Age ≥ 65 Female | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 73 | 0.80 (0.80, 0.80) |
| Age ≥ 65 Female | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 73 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 73 | 1.43 (1.29, 1.59) |
| Age ≥ 65 Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 73 | 9.69 (8.66, 10.85) |
| Age ≥ 65 Female | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 37 | 0.05 (0.05, 0.05) |
| Age ≥ 65 Female | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 37 | 0.80 (0.80, 0.80) |
| Age ≥ 65 Female | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 37 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Female | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 37 | 1.21 (1.21, 1.21) |
| Age ≥ 65 Female | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 37 | 7.62 (7.41, 7.84) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age \geq 65 Female | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.06) |
| Age \geq 65 Female | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 0.81 (0.78, 0.85) |
| Age \geq 65 Female | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| Age \geq 65 Female | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 1.77 (1.51, 2.07) |
| Age \geq 65 Female | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 9.10 (7.97, 10.39) |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 226 | 107.86 (86.26, 134.86) |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 226 | 1383.06 (1142.45, 1674.34) |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 226 | 815.18 (686.33, 968.24) |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 226 | 29.44 (26.22, 33.07) |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 226 | 38.55 (34.44, 43.16) |
| Age \geq 65 Female | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 73 | 181.28 (130.29, 252.23) |
| Age \geq 65 Female | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 73 | 2515.69 (1904.03, 3323.83) |
| Age \geq 65 Female | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 73 | 1531.27 (1200.95, 1952.46) |
| Age \geq 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 73 | 50.31 (42.13, 60.07) |
| Age \geq 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 73 | 66.32 (53.42, 82.34) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 37 | 0.05 (0.05, 0.05) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 37 | 0.80 (0.80, 0.80) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 37 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 37 | 1.25 (1.17, 1.33) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 37 | 7.51 (7.51, 7.51) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 75.63 (51.24, 111.63) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 931.81 (633.65, 1370.27) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 542.43 (412.65, 713.03) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 19.91 (16.26, 24.38) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 26.44 (21.70, 32.20) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 226 | 594.88 (449.10, 787.98) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 226 | 17921.58 (14230.07, 22570.72) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 226 | 12667.33 (10427.44, 15388.36) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 226 | 846.57 (721.74, 993.00) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 226 | 865.89 (756.54, 991.05) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------|--------|---------|---------------------|-------------------------|----|----------------------------------|
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 73 | 1744.00 (1096.73, 2773.29) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 73 | 55919.99 (38298.44, 81649.43) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 73 | 33279.22 (24477.15, 45246.55) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 73 | 2338.08 (1790.89, 3052.46) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 73 | 2213.46 (1752.04, 2796.39) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 37 | 0.05 (0.05, 0.05) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 37 | 0.80 (0.80, 0.80) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 37 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 37 | 1.30 (1.19, 1.43) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 37 | 7.69 (7.35, 8.05) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 401.40 (233.83, 689.05) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 13997.56 (9354.70, 20944.71) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 9533.48 (6959.53, 13059.39) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 663.91 (508.79, 866.33) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 680.56 (538.86, 859.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|-------|---------|---------------------|-------------------------|-----|----------------------|
| Age \geq 65 Male | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 164 | 0.05 (0.05, 0.05) |
| Age \geq 65 Male | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 164 | 0.80 (0.80, 0.80) |
| Age \geq 65 Male | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 164 | 0.15 (0.15, 0.15) |
| Age \geq 65 Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 164 | 1.21 (1.21, 1.21) |
| Age \geq 65 Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 164 | 7.51 (7.51, 7.51) |
| Age \geq 65 Male | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 47 | 0.05 (0.04, 0.05) |
| Age \geq 65 Male | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 47 | 0.80 (0.80, 0.80) |
| Age \geq 65 Male | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 47 | 0.15 (0.15, 0.15) |
| Age \geq 65 Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 47 | 1.66 (1.37, 2.00) |
| Age \geq 65 Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 47 | 8.60 (7.70, 9.62) |
| Age \geq 65 Male | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 29 | 0.05 (0.05, 0.05) |
| Age \geq 65 Male | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 29 | 0.80 (0.80, 0.80) |
| Age \geq 65 Male | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 29 | 0.15 (0.15, 0.15) |
| Age \geq 65 Male | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 29 | 1.21 (1.21, 1.21) |
| Age \geq 65 Male | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 29 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age \geq 65 Male | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) |
| Age \geq 65 Male | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.81 (0.78, 0.84) |
| Age \geq 65 Male | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) |
| Age \geq 65 Male | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.55 (1.37, 1.76) |
| Age \geq 65 Male | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 9.29 (8.10, 10.65) |
| Age \geq 65 Male | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 164 | 101.43 (77.47, 132.81) |
| Age \geq 65 Male | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 164 | 1405.41 (1112.39, 1775.62) |
| Age \geq 65 Male | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 164 | 777.59 (649.48, 930.96) |
| Age \geq 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 164 | 26.89 (23.31, 31.02) |
| Age \geq 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 164 | 36.83 (31.81, 42.63) |
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 47 | 259.42 (147.00, 457.81) |
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 47 | 3422.86 (2178.46, 5378.10) |
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 47 | 1428.51 (1027.92, 1985.21) |
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 47 | 62.61 (46.81, 83.75) |
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 47 | 57.47 (44.46, 74.29) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 29 | 0.05 (0.05, 0.05) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 29 | 0.80 (0.80, 0.80) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 29 | 0.15 (0.15, 0.15) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 29 | 1.21 (1.21, 1.21) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 29 | 7.51 (7.51, 7.51) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 76.80 (50.51, 116.79) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 1041.94 (729.11, 1488.98) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 518.70 (393.95, 682.95) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 18.59 (14.96, 23.11) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 25.87 (20.55, 32.57) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 164 | 498.06 (364.76, 680.08) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 164 | 17661.59 (13716.78, 22740.88) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 164 | 13072.56 (10513.04, 16255.22) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 164 | 825.07 (691.94, 983.81) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 164 | 747.39 (639.52, 873.46) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|--------|---------|---------------------|-------------------------|----|----------------------------------|
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 47 | 2524.36 (1375.71, 4632.06) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 47 | 59673.02 (36223.25, 98303.40) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 47 | 33151.92 (21828.30, 50349.78) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 47 | 2390.44 (1693.45, 3374.29) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 47 | 2045.76 (1495.80, 2797.92) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 29 | 0.05 (0.05, 0.05) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 29 | 0.80 (0.80, 0.80) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 29 | 0.15 (0.15, 0.15) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 29 | 1.21 (1.21, 1.21) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 29 | 7.51 (7.51, 7.51) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 343.06 (197.27, 596.59) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 14599.56 (10069.02, 21168.62) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 10038.45 (7048.36, 14297.03) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 595.51 (450.41, 787.35) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 615.46 (481.20, 787.17) |

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 (BAU/ml) | 99 | 0.05 (0.05, 0.05) |
| Hispanic or Latino | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 99 | 0.80 (0.80, 0.80) |
| Hispanic or Latino | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 99 | 0.15 (0.15, 0.15) |
| Hispanic or Latino | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 99 | 1.21 (1.21, 1.21) |
| Hispanic or Latino | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 99 | 7.51 (7.51, 7.51) |
| Hispanic or Latino | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 31 | 0.05 (0.05, 0.05) |
| Hispanic or Latino | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 31 | 0.80 (0.80, 0.80) |
| Hispanic or Latino | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 31 | 0.15 (0.15, 0.15) |
| Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 31 | 1.30 (1.20, 1.41) |
| Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 31 | 8.94 (7.17, 11.14) |
| Hispanic or Latino | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 20 | 0.05 (0.05, 0.05) |
| Hispanic or Latino | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 20 | 0.80 (0.80, 0.80) |
| Hispanic or Latino | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 20 | 0.15 (0.15, 0.15) |
| Hispanic or Latino | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 20 | 1.21 (1.21, 1.21) |
| Hispanic or Latino | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 20 | 8.68 (6.92, 10.87) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|--------|---------|---------------------|-------------------------|----|------------------------------|
| Hispanic or Latino | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 34 | 0.05 (0.05, 0.05) |
| Hispanic or Latino | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 34 | 0.81 (0.79, 0.83) |
| Hispanic or Latino | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 34 | 0.15 (0.15, 0.15) |
| Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 34 | 1.56 (1.22, 2.01) |
| Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 34 | 11.37 (8.64, 14.96) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 99 | 46.32 (28.82, 74.43) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 99 | 502.10 (352.24, 715.72) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 99 | 338.02 (242.86, 470.47) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 99 | 18.49 (14.43, 23.71) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 99 | 30.05 (24.15, 37.41) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 31 | 43.00 (20.21, 91.49) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 31 | 1004.65 (484.57, 2082.93) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 31 | 442.54 (245.55, 797.58) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 31 | 22.57 (15.32, 33.26) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 31 | 38.37 (24.64, 59.75) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|--------|---------|---------------------|-------------------------|----|-------------------------------|
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 20 | 0.05 (0.05, 0.05) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 20 | 0.80 (0.80, 0.80) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 20 | 0.15 (0.15, 0.15) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 20 | 1.21 (1.21, 1.21) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 20 | 7.51 (7.51, 7.51) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 34 | 25.54 (13.70, 47.59) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 34 | 338.50 (176.86, 647.86) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 34 | 173.67 (111.05, 271.61) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 34 | 10.06 (6.98, 14.48) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 34 | 21.37 (15.55, 29.37) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 99 | 162.78 (90.74, 292.01) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 99 | 6188.84 (4091.31, 9361.73) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 99 | 4186.98 (2879.54, 6088.08) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 99 | 567.55 (425.73, 756.63) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 99 | 690.79 (533.04, 895.23) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|--------|---------|---------------------|-------------------------|----|---------------------------------|
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 31 | 483.42 (160.82, 1453.11) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 31 | 10296.90 (5080.81, 20867.99) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 31 | 7610.09 (3673.58, 15764.86) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 31 | 888.60 (580.47, 1360.29) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 31 | 1748.56 (1094.71, 2792.95) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 20 | 0.05 (0.05, 0.05) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 20 | 0.80 (0.80, 0.80) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 20 | 0.15 (0.15, 0.15) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 20 | 1.35 (1.15, 1.59) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 20 | 7.80 (7.24, 8.39) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 34 | 128.60 (56.95, 290.39) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 34 | 3323.85 (1770.49, 6240.10) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 34 | 2202.73 (1326.45, 3657.89) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 34 | 349.80 (194.63, 628.69) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 34 | 487.73 (302.81, 785.59) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|------------------------|-------|---------|---------------------|-------------------------|-----|-----------------------|
| Not Hispanic or Latino | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 623 | 0.05 (0.05, 0.05) |
| Not Hispanic or Latino | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 623 | 0.80 (0.80, 0.80) |
| Not Hispanic or Latino | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 623 | 0.15 (0.15, 0.15) |
| Not Hispanic or Latino | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 623 | 1.21 (1.21, 1.21) |
| Not Hispanic or Latino | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 623 | 7.51 (7.51, 7.51) |
| Not Hispanic or Latino | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 194 | 0.05 (0.05, 0.05) |
| Not Hispanic or Latino | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 194 | 0.82 (0.79, 0.84) |
| Not Hispanic or Latino | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 194 | 0.16 (0.15, 0.16) |
| Not Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 194 | 1.70 (1.53, 1.90) |
| Not Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 194 | 9.92 (8.97, 10.97) |
| Not Hispanic or Latino | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 113 | 0.05 (0.05, 0.05) |
| Not Hispanic or Latino | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 113 | 0.80 (0.80, 0.80) |
| Not Hispanic or Latino | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 113 | 0.15 (0.15, 0.15) |
| Not Hispanic or Latino | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 113 | 1.21 (1.21, 1.22) |
| Not Hispanic or Latino | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 113 | 7.56 (7.46, 7.67) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|------------------------|--------|---------|---------------------|-------------------------|-----|-----------------------------|
| Not Hispanic or Latino | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 201 | 0.05 (0.05, 0.05) |
| Not Hispanic or Latino | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 201 | 0.80 (0.79, 0.80) |
| Not Hispanic or Latino | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 201 | 0.15 (0.15, 0.16) |
| Not Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 201 | 1.66 (1.49, 1.85) |
| Not Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 201 | 9.51 (8.74, 10.34) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 623 | 38.39 (31.70, 46.50) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 623 | 466.22 (401.27, 541.69) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 623 | 258.55 (229.78, 290.93) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 623 | 17.21 (15.60, 18.99) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 623 | 25.58 (23.47, 27.88) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 194 | 85.41 (63.37, 115.13) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 194 | 805.15 (610.19, 1062.40) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 194 | 462.89 (383.82, 558.25) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 194 | 33.52 (28.49, 39.45) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 194 | 51.70 (44.84, 59.62) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 113 | 0.05 (0.05, 0.05) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 113 | 0.80 (0.80, 0.80) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 113 | 0.15 (0.15, 0.15) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 113 | 1.22 (1.20, 1.23) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 113 | 7.51 (7.51, 7.51) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 201 | 27.97 (20.22, 38.70) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 201 | 303.85 (222.61, 414.76) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 201 | 171.82 (134.06, 220.21) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 201 | 11.72 (9.73, 14.12) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 201 | 20.30 (17.53, 23.50) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 623 | 169.83 (136.22, 211.74) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 623 | 4600.05 (3897.55, 5429.17) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 623 | 3277.33 (2816.17, 3814.02) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 623 | 412.28 (366.72, 463.51) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 623 | 551.24 (495.10, 613.75) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|------------------------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 194 | 637.57 (432.60, 939.64) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 194 | 16777.78 (12636.54, 22276.19) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 194 | 10681.93 (8474.58, 13464.24) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 194 | 1278.57 (1013.95, 1612.25) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 194 | 1545.15 (1306.41, 1827.53) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 113 | 0.05 (0.05, 0.05) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 113 | 0.80 (0.80, 0.80) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 113 | 0.15 (0.15, 0.15) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 113 | 1.24 (1.20, 1.27) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 113 | 7.51 (7.51, 7.51) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 201 | 140.31 (93.26, 211.10) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 201 | 2986.56 (2181.24, 4089.20) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 201 | 2446.19 (1807.34, 3310.86) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 201 | 304.11 (247.38, 373.85) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 201 | 451.25 (381.67, 533.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------------|-------|---------|---------------------|-------------------------|----|------------------------|
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 25 | 0.05 (0.05, 0.05) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 25 | 0.80 (0.80, 0.80) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 25 | 0.15 (0.15, 0.15) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 25 | 1.21 (1.21, 1.21) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 25 | 7.51 (7.51, 7.51) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 9 | 0.05 (0.04, 0.05) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 9 | 0.80 (0.80, 0.80) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 9 | 0.15 (0.15, 0.15) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 9 | 1.96 (1.01, 3.81) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 9 | 12.12 (7.72, 19.04) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 5 | 0.05 (0.05, 0.05) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 5 | 0.80 (0.80, 0.80) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 5 | 0.15 (0.15, 0.15) |
| Not reported and unknown | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 5 | 1.21 (1.21, 1.21) |
| Not reported and unknown | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 5 | 10.55 (6.25, 17.81) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------------|--------|---------|---------------------|-------------------------|----|------------------------------|
| Not reported and unknown | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 6 | 0.05 (0.05, 0.05) |
| Not reported and unknown | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 6 | 0.80 (0.80, 0.80) |
| Not reported and unknown | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 6 | 0.15 (0.15, 0.15) |
| Not reported and unknown | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 6 | 1.21 (1.21, 1.21) |
| Not reported and unknown | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 6 | 17.05 (8.42, 34.53) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 25 | 55.82 (28.97, 107.55) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 25 | 884.05 (622.13, 1256.23) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 25 | 363.19 (173.61, 759.79) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 25 | 19.70 (13.53, 28.69) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 25 | 27.32 (16.34, 45.68) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 9 | 161.82 (17.77, 1473.20) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 9 | 2628.59 (831.44, 8310.29) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 9 | 1546.38 (962.33, 2484.89) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 9 | 48.00 (17.20, 133.97) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 9 | 105.37 (26.78, 414.58) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------------|--------|---------|---------------------|-------------------------|----|--------------------------------|
| Not reported and unknown | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 5 | 0.05 (0.05, 0.05) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 5 | 0.80 (0.80, 0.80) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 5 | 0.15 (0.15, 0.15) |
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 5 | 1.21 (1.21, 1.21) |
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 5 | 7.51 (7.51, 7.51) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 6 | 16.17 (2.67, 97.74) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 6 | 170.13 (66.82, 433.17) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 6 | 96.72 (31.92, 293.01) |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 6 | 7.98 (3.59, 17.74) |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 6 | 13.28 (7.98, 22.11) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 25 | 174.92 (72.92, 419.62) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 25 | 6861.47 (3804.55, 12374.59) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 25 | 5091.79 (2619.11, 9898.91) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 25 | 586.32 (417.72, 822.95) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 25 | 694.34 (509.90, 945.49) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------------|--------|---------|---------------------|-------------------------|---|-----------------------------------|
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 9 | 4104.21 (792.29, 21260.50) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 9 | 86647.47 (19862.74, 377983.34) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 9 | 50715.42 (3247.12, 792103.36) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 9 | 2378.74 (1267.08, 4465.69) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 9 | 1529.62 (981.77, 2383.18) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 5 | 0.05 (0.05, 0.05) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 5 | 0.80 (0.80, 0.80) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 5 | 0.15 (0.15, 0.15) |
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 5 | 1.21 (1.21, 1.21) |
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 5 | 7.51 (7.51, 7.51) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 6 | 27.10 (2.29, 321.28) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 6 | 4119.35 (942.68, 18000.89) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 6 | 416.74 (91.60, 1895.90) |
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 6 | 286.72 (91.74, 896.14) |
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 6 | 467.99 (138.35, 1583.06) |

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 (BAU/ml) | 370 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 0.80 (0.80, 0.80) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 1.21 (1.21, 1.21) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 370 | 7.51 (7.51, 7.51) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 0.83 (0.79, 0.87) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 1.71 (1.48, 1.97) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 118 | 10.90 (9.44, 12.59) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 1.21 (1.21, 1.21) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|--------|---------|---------------------|-------------------------|-----|-----------------------------|
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 0.80 (0.80, 0.80) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 1.60 (1.40, 1.82) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 9.27 (8.31, 10.33) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 34.08 (26.39, 44.01) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 400.44 (330.41, 485.31) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 237.37 (204.22, 275.89) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 15.55 (13.64, 17.71) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 370 | 24.07 (21.54, 26.91) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 82.41 (56.70, 119.78) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 752.05 (520.11, 1087.41) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 513.05 (403.64, 652.12) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 33.13 (26.98, 40.67) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 118 | 52.80 (43.78, 63.69) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 1.22 (1.20, 1.24) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 26.72 (17.39, 41.07) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 267.93 (174.53, 411.31) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 182.62 (133.68, 249.48) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 11.37 (8.85, 14.60) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 20.09 (16.51, 24.45) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 136.02 (102.81, 179.97) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 3965.19 (3190.18, 4928.49) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 2905.77 (2384.91, 3540.40) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 355.22 (305.63, 412.85) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 370 | 506.55 (440.71, 582.22) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 735.04 (440.86, 1225.53) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 17684.90 (12263.74, 25502.49) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 10349.34 (7588.49, 14114.66) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 1312.29 (957.88, 1797.84) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 118 | 1677.99 (1373.02, 2050.70) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 1.22 (1.20, 1.25) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 138.49 (81.68, 234.80) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 2844.53 (1856.90, 4357.44) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 2385.84 (1614.03, 3526.73) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 307.89 (235.98, 401.71) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 448.64 (360.71, 558.00) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------------------|-------|---------|---------------------|-------------------------|-----|----------------------|
| Black or African American | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 184 | 0.05 (0.05, 0.05) |
| Black or African American | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 184 | 0.80 (0.80, 0.80) |
| Black or African American | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 184 | 0.15 (0.15, 0.15) |
| Black or African American | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 184 | 1.21 (1.21, 1.21) |
| Black or African American | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 184 | 7.51 (7.51, 7.51) |
| Black or African American | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) |
| Black or African American | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.80 (0.80, 0.80) |
| Black or African American | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.16 (0.15, 0.17) |
| Black or African American | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 1.68 (1.40, 2.01) |
| Black or African American | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 58 | 8.49 (7.63, 9.45) |
| Black or African American | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0.05 (0.05, 0.05) |
| Black or African American | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0.80 (0.80, 0.80) |
| Black or African American | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 40 | 0.15 (0.15, 0.15) |
| Black or African American | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 40 | 1.23 (1.19, 1.26) |
| Black or African American | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 40 | 8.16 (7.28, 9.15) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------------------|--------|---------|---------------------|-------------------------|-----|------------------------------|
| Black or African American | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 45 | 0.05 (0.04, 0.06) |
| Black or African American | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 45 | 0.80 (0.80, 0.80) |
| Black or African American | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 45 | 0.16 (0.15, 0.17) |
| Black or African American | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 45 | 1.89 (1.45, 2.47) |
| Black or African American | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 45 | 10.14 (8.39, 12.26) |
| Black or African American | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 184 | 48.36 (35.37, 66.13) |
| Black or African American | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 184 | 618.89 (477.97, 801.36) |
| Black or African American | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 184 | 277.76 (220.22, 350.33) |
| Black or African American | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 184 | 20.43 (17.33, 24.10) |
| Black or African American | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 184 | 29.05 (24.98, 33.77) |
| Black or African American | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 91.09 (50.53, 164.20) |
| Black or African American | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 1224.75 (802.19, 1869.89) |
| Black or African American | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 483.24 (358.12, 652.08) |
| Black or African American | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 33.46 (25.52, 43.87) |
| Black or African American | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 58 | 49.22 (38.99, 62.14) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Black or African American | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0.05 (0.05, 0.05) |
| Black or African American | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0.80 (0.80, 0.80) |
| Black or African American | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 40 | 0.15 (0.15, 0.15) |
| Black or African American | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 40 | 1.21 (1.21, 1.21) |
| Black or African American | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 40 | 7.51 (7.51, 7.51) |
| Black or African American | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 45 | 44.00 (20.44, 94.70) |
| Black or African American | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 45 | 495.71 (275.52, 891.88) |
| Black or African American | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 45 | 158.14 (87.58, 285.56) |
| Black or African American | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 45 | 15.82 (10.87, 23.04) |
| Black or African American | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 45 | 20.73 (15.40, 27.92) |
| Black or African American | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 184 | 204.32 (141.34, 295.38) |
| Black or African American | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 184 | 6550.93 (4947.81, 8673.48) |
| Black or African American | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 184 | 4332.80 (3331.81, 5634.52) |
| Black or African American | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 184 | 466.63 (385.59, 564.71) |
| Black or African American | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 184 | 602.26 (505.22, 717.93) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|---------------------------|--------|---------|---------------------|-------------------------|----|----------------------------------|
| Black or African American | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 510.41 (276.01, 943.86) |
| Black or African American | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 16791.27 (11442.61, 24640.08) |
| Black or African American | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 11834.30 (8032.47, 17435.57) |
| Black or African American | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 1190.86 (863.21, 1642.88) |
| Black or African American | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 58 | 1295.98 (930.59, 1804.83) |
| Black or African American | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0.05 (0.05, 0.05) |
| Black or African American | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0.80 (0.80, 0.80) |
| Black or African American | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 40 | 0.15 (0.15, 0.15) |
| Black or African American | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 40 | 1.21 (1.21, 1.21) |
| Black or African American | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 40 | 7.51 (7.51, 7.51) |
| Black or African American | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 45 | 139.02 (56.11, 344.45) |
| Black or African American | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 45 | 3611.11 (2108.60, 6184.23) |
| Black or African American | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 45 | 2485.87 (1256.81, 4916.86) |
| Black or African American | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 45 | 367.94 (254.22, 532.53) |
| Black or African American | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 45 | 379.30 (263.98, 545.00) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|-------|---------|---------------------|-------------------------|----|----------------------|
| Asian | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 56 | 0.05 (0.05, 0.05) |
| Asian | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 56 | 0.80 (0.80, 0.80) |
| Asian | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 56 | 0.15 (0.15, 0.15) |
| Asian | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 56 | 1.21 (1.21, 1.21) |
| Asian | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 56 | 7.51 (7.51, 7.51) |
| Asian | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 19 | 0.05 (0.05, 0.05) |
| Asian | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 19 | 0.80 (0.80, 0.80) |
| Asian | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 19 | 0.15 (0.15, 0.15) |
| Asian | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 19 | 1.70 (1.26, 2.28) |
| Asian | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 19 | 7.79 (7.25, 8.36) |
| Asian | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 10 | 0.05 (0.05, 0.05) |
| Asian | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 10 | 0.80 (0.80, 0.80) |
| Asian | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 10 | 0.15 (0.15, 0.15) |
| Asian | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 10 | 1.21 (1.21, 1.21) |
| Asian | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 10 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|----|-----------------------------|
| Asian | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 27 | 0.05 (0.04, 0.06) |
| Asian | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 27 | 0.81 (0.78, 0.84) |
| Asian | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 27 | 0.15 (0.15, 0.15) |
| Asian | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 27 | 1.74 (1.28, 2.38) |
| Asian | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 27 | 10.98 (8.68, 13.89) |
| Asian | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 56 | 51.94 (30.47, 88.55) |
| Asian | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 56 | 566.83 (333.88, 962.32) |
| Asian | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 56 | 346.14 (242.73, 493.61) |
| Asian | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 56 | 21.15 (16.36, 27.33) |
| Asian | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 56 | 27.00 (20.02, 36.41) |
| Asian | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 19 | 67.33 (25.71, 176.36) |
| Asian | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 19 | 699.97 (328.96, 1489.42) |
| Asian | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 19 | 336.86 (211.65, 536.15) |
| Asian | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 19 | 30.29 (16.75, 54.77) |
| Asian | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 19 | 44.36 (28.60, 68.80) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|----|--------------------------------|
| Asian | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 10 | 0.05 (0.05, 0.05) |
| Asian | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 10 | 0.80 (0.80, 0.80) |
| Asian | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 10 | 0.15 (0.15, 0.15) |
| Asian | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 10 | 1.21 (1.21, 1.21) |
| Asian | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 10 | 7.51 (7.51, 7.51) |
| Asian | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 27 | 16.51 (8.01, 34.05) |
| Asian | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 27 | 249.55 (119.56, 520.87) |
| Asian | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 27 | 133.39 (65.36, 272.24) |
| Asian | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 27 | 9.06 (5.87, 13.97) |
| Asian | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 27 | 22.24 (16.20, 30.52) |
| Asian | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 56 | 411.66 (201.84, 839.58) |
| Asian | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 56 | 6371.68 (3790.87, 10709.49) |
| Asian | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 56 | 4086.36 (2466.61, 6769.76) |
| Asian | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 56 | 663.53 (502.33, 876.46) |
| Asian | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 56 | 607.99 (457.15, 808.59) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|----|---------------------------------|
| Asian | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 19 | 590.76 (180.19, 1936.83) |
| Asian | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 19 | 13898.62 (4771.63, 40483.40) |
| Asian | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 19 | 8349.05 (4992.03, 13963.57) |
| Asian | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 19 | 1495.86 (986.88, 2267.36) |
| Asian | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 19 | 1308.98 (747.39, 2292.57) |
| Asian | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 10 | 0.05 (0.05, 0.05) |
| Asian | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 10 | 0.80 (0.80, 0.80) |
| Asian | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 10 | 0.15 (0.15, 0.15) |
| Asian | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 10 | 1.38 (1.08, 1.76) |
| Asian | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 10 | 7.51 (7.51, 7.51) |
| Asian | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 27 | 101.48 (29.62, 347.66) |
| Asian | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 27 | 2953.93 (1396.61, 6247.76) |
| Asian | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 27 | 1905.73 (805.16, 4510.69) |
| Asian | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 27 | 179.78 (107.24, 301.40) |
| Asian | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 27 | 516.66 (344.79, 774.19) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------------------|-------|---------|---------------------|-------------------------|----|-----------------------|
| American Indian or Alaska Native | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 0.05 (0.05, 0.05) |
| American Indian or Alaska Native | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 0.80 (0.80, 0.80) |
| American Indian or Alaska Native | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 0.15 (0.15, 0.15) |
| American Indian or Alaska Native | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 1.21 (1.21, 1.21) |
| American Indian or Alaska Native | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 16 | 7.51 (7.51, 7.51) |
| American Indian or Alaska Native | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 0.05 (0.05, 0.05) |
| American Indian or Alaska Native | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 0.80 (0.80, 0.80) |
| American Indian or Alaska Native | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 0.15 (0.15, 0.15) |
| American Indian or Alaska Native | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 1.75 (1.07, 2.85) |
| American Indian or Alaska Native | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 10 | 9.50 (6.80, 13.26) |
| American Indian or Alaska Native | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0.05 (0.05, 0.05) |
| American Indian or Alaska Native | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0.80 (0.80, 0.80) |
| American Indian or Alaska Native | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) |
| American Indian or Alaska Native | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 2 | 1.21 (1.21, 1.21) |
| American Indian or Alaska Native | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------------------|--------|---------|---------------------|-------------------------|----|------------------------------|
| American Indian or Alaska Native | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 7 | 0.05 (0.04, 0.07) |
| American Indian or Alaska Native | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 7 | 0.80 (0.80, 0.80) |
| American Indian or Alaska Native | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 7 | 0.15 (0.15, 0.15) |
| American Indian or Alaska Native | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 7 | 1.39 (1.05, 1.83) |
| American Indian or Alaska Native | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 7 | 13.04 (6.28, 27.07) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 25.22 (11.33, 56.17) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 455.88 (234.59, 885.93) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 207.27 (109.14, 393.62) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 18.96 (13.23, 27.17) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 16 | 20.17 (13.85, 29.35) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 232.47 (53.43, 1011.46) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 1312.99 (224.38, 7683.24) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 416.16 (65.22, 2655.65) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 57.28 (24.69, 132.87) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 10 | 107.89 (46.22, 251.85) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------------------|--------|---------|---------------------|-------------------------|----|-------------------------------|
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0.05 (0.05, 0.05) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0.80 (0.80, 0.80) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 2 | 1.21 (1.21, 1.21) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 7 | 33.82 (14.88, 76.90) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 7 | 262.68 (163.15, 422.93) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 7 | 135.50 (83.53, 219.82) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 7 | 13.57 (9.48, 19.44) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 7 | 19.42 (14.26, 26.44) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 66.41 (21.00, 210.06) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 3570.73 (1847.87, 6899.89) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 2054.65 (1024.62, 4120.16) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 306.21 (168.96, 554.95) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 16 | 494.65 (261.44, 935.89) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------------------|--------|---------|---------------------|-------------------------|----|----------------------------------|
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 1458.89 (207.87, 10238.70) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 23740.75 (5249.95, 107357.95) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 37087.45 (6047.70, 227438.46) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 1086.35 (243.01, 4856.54) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 10 | 2009.48 (634.11, 6367.97) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0.05 (0.05, 0.05) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0.80 (0.80, 0.80) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 2 | 1.44 (1.00, 2.09) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 7 | 174.33 (66.36, 457.98) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 7 | 4351.57 (1137.99, 16639.96) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 7 | 1731.09 (1091.13, 2746.41) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 7 | 360.80 (161.38, 806.62) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 7 | 545.79 (275.33, 1081.96) |

(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 (BAU/ml) | 17 | 0.05 (0.05, 0.05) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 17 | 0.80 (0.80, 0.80) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 17 | 0.15 (0.15, 0.15) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 17 | 1.21 (1.21, 1.21) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 17 | 7.51 (7.51, 7.51) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 4 | 0.05 (0.05, 0.05) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 4 | 0.80 (0.80, 0.80) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 4 | 0.15 (0.15, 0.15) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 4 | 1.52 (1.03, 2.23) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 4 | 10.96 (5.71, 21.05) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0.05 (0.05, 0.05) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0.80 (0.80, 0.80) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 2 | 1.21 (1.21, 1.21) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 2 | 12.53 (6.04, 26.02) |

(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 (BAU/ml) | 2 | 0.05 (0.05, 0.05) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 0.80 (0.80, 0.80) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 1.21 (1.21, 1.21) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 17 | 41.57 (10.45, 165.37) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 17 | 831.43 (392.72, 1760.20) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 17 | 281.31 (161.65, 489.57) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 17 | 14.63 (8.47, 25.25) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 17 | 34.71 (21.21, 56.78) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 4 | 315.89 (136.25, 732.40) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 4 | 2517.21 (1854.59, 3416.57) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 4 | 1094.52 (540.97, 2214.51) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 4 | 68.87 (50.08, 94.70) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 4 | 87.89 (73.45, 105.16) |

(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 (BAU/ml) | 2 | 0.05 (0.05, 0.05) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0.80 (0.80, 0.80) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 2 | 1.21 (1.21, 1.21) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 249.46 (103.20, 603.03) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 2643.54 (1298.34, 5382.52) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 96.24 (94.64, 97.87) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 33.19 (19.82, 55.58) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 2 | 15.55 (10.80, 22.39) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 17 | 345.70 (100.57, 1188.36) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 17 | 5000.82 (2764.75, 9045.36) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 17 | 3526.24 (1694.94, 7336.17) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 17 | 711.04 (339.62, 1488.66) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 17 | 1038.11 (632.04, 1705.07) |

(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 (BAU/ml) | 4 | 795.44 (596.70, 1060.38) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 4 | 117506.98 (74615.70, 185053.42) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 4 | 102048.52 (60099.71, 173277.04) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 4 | 2330.62 (1137.68, 4774.45) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 4 | 5679.32 (4474.10, 7209.18) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 0.05 (0.05, 0.05) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 2 | 0.80 (0.80, 0.80) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 2 | 1.21 (1.21, 1.21) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 112.85 (101.38, 125.62) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 1281.73 (1129.81, 1454.08) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 5853.33 (5254.52, 6520.38) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 865.00 (376.47, 1987.51) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 2 | 273.59 (192.26, 389.32) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------------|-------|---------|---------------------|-------------------------|----|------------------------|
| Multiracial | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 57 | 0.05 (0.05, 0.05) |
| Multiracial | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 57 | 0.80 (0.80, 0.80) |
| Multiracial | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 57 | 0.15 (0.15, 0.15) |
| Multiracial | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 57 | 1.21 (1.21, 1.21) |
| Multiracial | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 57 | 7.51 (7.51, 7.51) |
| Multiracial | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 0.05 (0.05, 0.05) |
| Multiracial | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 0.80 (0.80, 0.80) |
| Multiracial | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 0.15 (0.15, 0.15) |
| Multiracial | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 1.21 (1.21, 1.21) |
| Multiracial | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 10 | 10.28 (6.07, 17.40) |
| Multiracial | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 8 | 0.05 (0.05, 0.05) |
| Multiracial | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 8 | 0.80 (0.80, 0.80) |
| Multiracial | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 8 | 0.15 (0.15, 0.15) |
| Multiracial | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 8 | 1.21 (1.21, 1.21) |
| Multiracial | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 8 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------------|--------|---------|---------------------|-------------------------|----|-----------------------------|
| Multiracial | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 16 | 0.05 (0.05, 0.05) |
| Multiracial | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 16 | 0.83 (0.77, 0.89) |
| Multiracial | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 16 | 0.15 (0.15, 0.15) |
| Multiracial | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 16 | 1.60 (1.18, 2.16) |
| Multiracial | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 16 | 17.15 (10.75, 27.38) |
| Multiracial | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 57 | 63.72 (39.06, 103.95) |
| Multiracial | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 57 | 680.89 (439.41, 1055.08) |
| Multiracial | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 57 | 468.79 (300.62, 731.03) |
| Multiracial | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 57 | 24.25 (18.56, 31.68) |
| Multiracial | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 57 | 36.61 (28.88, 46.41) |
| Multiracial | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 35.81 (17.22, 74.45) |
| Multiracial | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 585.30 (248.65, 1377.72) |
| Multiracial | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 307.16 (121.84, 774.38) |
| Multiracial | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 20.16 (13.18, 30.82) |
| Multiracial | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 10 | 33.38 (15.78, 70.60) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------------|--------|---------|---------------------|-------------------------|----|--------------------------------|
| Multiracial | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 8 | 0.05 (0.05, 0.05) |
| Multiracial | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 8 | 0.80 (0.80, 0.80) |
| Multiracial | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 8 | 0.15 (0.15, 0.15) |
| Multiracial | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 8 | 1.21 (1.21, 1.21) |
| Multiracial | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 8 | 7.51 (7.51, 7.51) |
| Multiracial | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 16 | 29.89 (13.84, 64.54) |
| Multiracial | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 16 | 924.61 (523.85, 1631.96) |
| Multiracial | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 16 | 352.91 (218.34, 570.41) |
| Multiracial | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 16 | 9.72 (5.69, 16.62) |
| Multiracial | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 16 | 25.75 (16.52, 40.13) |
| Multiracial | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 57 | 255.11 (118.56, 548.94) |
| Multiracial | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 57 | 8215.71 (4964.67, 13595.66) |
| Multiracial | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 57 | 5617.50 (3951.81, 7985.29) |
| Multiracial | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 57 | 707.51 (496.25, 1008.71) |
| Multiracial | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 57 | 929.00 (667.01, 1293.91) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------------|--------|---------|---------------------|-------------------------|----|--------------------------------|
| Multiracial | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 406.85 (56.32, 2939.29) |
| Multiracial | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 7480.16 (2394.58, 23366.38) |
| Multiracial | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 5537.31 (1571.82, 19507.16) |
| Multiracial | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 855.78 (402.27, 1820.57) |
| Multiracial | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 10 | 1670.65 (1084.79, 2572.89) |
| Multiracial | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 8 | 0.05 (0.05, 0.05) |
| Multiracial | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 8 | 0.80 (0.80, 0.80) |
| Multiracial | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 8 | 0.15 (0.15, 0.15) |
| Multiracial | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 8 | 1.21 (1.21, 1.21) |
| Multiracial | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 8 | 7.51 (7.51, 7.51) |
| Multiracial | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 16 | 365.33 (82.27, 1622.24) |
| Multiracial | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 16 | 6641.75 (2467.22, 17879.61) |
| Multiracial | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 16 | 2918.31 (1507.00, 5651.30) |
| Multiracial | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 16 | 471.29 (253.46, 876.30) |
| Multiracial | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 16 | 819.72 (368.54, 1823.25) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|-------|---------|---------------------|-------------------------|----|-----------------------|
| Other | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 0.05 (0.05, 0.05) |
| Other | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 0.80 (0.80, 0.80) |
| Other | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 0.15 (0.15, 0.15) |
| Other | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 1.21 (1.21, 1.21) |
| Other | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 16 | 7.51 (7.51, 7.51) |
| Other | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 7 | 0.05 (0.04, 0.07) |
| Other | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 7 | 0.80 (0.80, 0.80) |
| Other | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 7 | 0.15 (0.15, 0.15) |
| Other | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 7 | 1.47 (1.06, 2.04) |
| Other | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 7 | 9.41 (6.79, 13.05) |
| Other | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0.05 (0.05, 0.05) |
| Other | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0.80 (0.80, 0.80) |
| Other | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0.15 (0.15, 0.15) |
| Other | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 1 | 1.21 (1.21, 1.21) |
| Other | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 1 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|----|-------------------------------|
| Other | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 13 | 0.05 (0.05, 0.05) |
| Other | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 13 | 0.80 (0.80, 0.80) |
| Other | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 13 | 0.15 (0.15, 0.15) |
| Other | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 13 | 1.43 (1.11, 1.85) |
| Other | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 13 | 8.37 (6.78, 10.34) |
| Other | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 45.59 (14.02, 148.20) |
| Other | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 954.67 (452.96, 2012.08) |
| Other | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 362.47 (196.46, 668.78) |
| Other | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 22.42 (13.44, 37.40) |
| Other | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 16 | 26.66 (14.34, 49.57) |
| Other | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 7 | 91.30 (29.66, 281.03) |
| Other | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 7 | 1683.69 (1105.78, 2563.63) |
| Other | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 7 | 577.79 (232.90, 1433.42) |
| Other | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 7 | 33.43 (19.66, 56.84) |
| Other | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 7 | 56.36 (37.43, 84.87) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|----|--------------------------------|
| Other | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0.05 (0.05, 0.05) |
| Other | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0.80 (0.80, 0.80) |
| Other | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0.15 (0.15, 0.15) |
| Other | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 1 | 1.21 (1.21, 1.21) |
| Other | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 1 | 7.51 (7.51, 7.51) |
| Other | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 13 | 30.54 (11.57, 80.62) |
| Other | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 13 | 233.75 (99.57, 548.73) |
| Other | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 13 | 153.92 (75.16, 315.23) |
| Other | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 13 | 9.72 (5.02, 18.80) |
| Other | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 13 | 18.09 (10.25, 31.92) |
| Other | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 179.09 (80.22, 399.84) |
| Other | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 5123.38 (1923.26, 13648.21) |
| Other | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 6094.59 (2760.52, 13455.48) |
| Other | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 838.28 (321.29, 2187.15) |
| Other | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 16 | 537.41 (216.29, 1335.28) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------|--------|---------|---------------------|-------------------------|----|---------------------------------|
| Other | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 7 | 469.54 (166.46, 1324.43) |
| Other | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 7 | 9884.65 (2588.20, 37750.60) |
| Other | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 7 | 15218.24 (5421.81, 42715.39) |
| Other | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 7 | 1132.03 (353.43, 3625.94) |
| Other | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 7 | 1571.30 (512.63, 4816.26) |
| Other | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0.05 (0.05, 0.05) |
| Other | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0.80 (0.80, 0.80) |
| Other | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0.15 (0.15, 0.15) |
| Other | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 1 | 1.21 (1.21, 1.21) |
| Other | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 1 | 7.51 (7.51, 7.51) |
| Other | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 13 | 98.02 (28.64, 335.45) |
| Other | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 13 | 2580.02 (811.17, 8206.11) |
| Other | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 13 | 1905.90 (604.75, 6006.49) |
| Other | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 13 | 406.27 (141.59, 1165.71) |
| Other | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 13 | 486.57 (223.05, 1061.44) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------------|-------|---------|---------------------|-------------------------|---|-----------------------|
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 4 | 0.05 (0.05, 0.05) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 4 | 0.80 (0.80, 0.80) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 4 | 0.15 (0.15, 0.15) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 4 | 1.21 (1.21, 1.21) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 4 | 7.51 (7.51, 7.51) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0.05 (0.05, 0.05) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0.80 (0.80, 0.80) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0.15 (0.15, 0.15) |
| Not reported and unknown | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 1 | 1.21 (1.21, 1.21) |
| Not reported and unknown | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 1 | 7.51 (7.51, 7.51) |
| Not reported and unknown | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 0.05 (0.05, 0.05) |
| Not reported and unknown | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 0.80 (0.80, 0.80) |
| Not reported and unknown | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) |
| Not reported and unknown | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 3.37 (0.79, 14.35) |
| Not reported and unknown | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------------|--------|---------|---------------------|-------------------------|---|-----------------------------|
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 4 | 22.70 (0.94, 547.12) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 4 | 425.33 (131.39, 1376.88) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 4 | 214.96 (30.19, 1530.49) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 4 | 17.17 (3.38, 87.16) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 4 | 18.80 (5.55, 63.69) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0.05 (0.05, 0.05) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0.80 (0.80, 0.80) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0.15 (0.15, 0.15) |
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 1 | 1.21 (1.21, 1.21) |
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 1 | 7.51 (7.51, 7.51) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 11.18 (5.91, 21.17) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 355.07 (154.05, 818.42) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 115.90 (46.80, 287.06) |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 9.94 (5.30, 18.65) |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 2 | 20.03 (5.01, 80.10) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------------|--------|---------|---------------------|-------------------------|---|-------------------------------|
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 4 | 239.33 (43.05, 1330.56) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 4 | 1359.83 (35.46, 52152.50) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 4 | 1869.74 (295.22, 11841.84) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 4 | 214.93 (97.85, 472.11) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 4 | 527.73 (211.45, 1317.11) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 0.05 (0.05, 0.05) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 1 | 0.80 (0.80, 0.80) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 1 | 0.15 (0.15, 0.15) |
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 1 | 1.21 (1.21, 1.21) |
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 1 | 7.51 (7.51, 7.51) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 59.40 (5.40, 653.72) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 1036.14 (428.68, 2504.42) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 2699.56 (369.10, 19744.27) |
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 111.24 (25.15, 491.99) |
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 2 | 374.13 (373.95, 374.31) |

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 (BAU/ml) | 377 | 0.05 (0.05, 0.05) |
| Communities of Color | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 377 | 0.80 (0.80, 0.80) |
| Communities of Color | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 377 | 0.15 (0.15, 0.15) |
| Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 377 | 1.21 (1.21, 1.21) |
| Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 377 | 7.51 (7.51, 7.51) |
| Communities of Color | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 116 | 0.05 (0.05, 0.05) |
| Communities of Color | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 116 | 0.80 (0.80, 0.80) |
| Communities of Color | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 116 | 0.16 (0.15, 0.16) |
| Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 116 | 1.62 (1.43, 1.83) |
| Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 116 | 8.58 (7.93, 9.28) |
| Communities of Color | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0.05 (0.05, 0.05) |
| Communities of Color | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0.80 (0.80, 0.80) |
| Communities of Color | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0.15 (0.15, 0.15) |
| Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 75 | 1.22 (1.20, 1.24) |
| Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 75 | 8.05 (7.49, 8.64) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|--------|---------|---------------------|-------------------------|-----|-----------------------------|
| Communities of Color | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 0.05 (0.05, 0.06) |
| Communities of Color | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 0.80 (0.79, 0.81) |
| Communities of Color | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 0.16 (0.15, 0.16) |
| Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 1.69 (1.46, 1.95) |
| Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 120 | 10.64 (9.36, 12.10) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 377 | 47.88 (38.41, 59.67) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 377 | 601.72 (499.59, 724.73) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 377 | 312.83 (267.85, 365.36) |
| Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 377 | 20.20 (18.04, 22.63) |
| Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 377 | 28.84 (25.80, 32.24) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 116 | 80.72 (53.07, 122.80) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 116 | 988.93 (705.93, 1385.38) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 116 | 422.75 (324.82, 550.21) |
| Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 116 | 32.03 (25.63, 40.04) |
| Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 116 | 49.02 (40.19, 59.78) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0.05 (0.05, 0.05) |
| Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0.80 (0.80, 0.80) |
| Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0.15 (0.15, 0.15) |
| Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 75 | 1.21 (1.21, 1.21) |
| Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 75 | 7.51 (7.51, 7.51) |
| Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 27.93 (18.97, 41.13) |
| Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 352.63 (249.40, 498.60) |
| Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 155.52 (114.15, 211.87) |
| Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 11.40 (9.17, 14.17) |
| Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 120 | 20.39 (17.22, 24.13) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 377 | 227.46 (171.83, 301.11) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 377 | 6116.64 (5002.83, 7478.42) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 377 | 4158.17 (3454.12, 5005.74) |
| Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 377 | 549.84 (479.76, 630.15) |
| Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 377 | 656.33 (575.68, 748.27) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|----------------------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 116 | 543.72 (333.11, 887.50) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 116 | 15372.49 (10572.42, 22351.88) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 116 | 11322.94 (8105.96, 15816.62) |
| Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 116 | 1181.83 (923.19, 1512.91) |
| Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 116 | 1409.31 (1101.23, 1803.57) |
| Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 0.05 (0.05, 0.05) |
| Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 75 | 0.80 (0.80, 0.80) |
| Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 75 | 0.15 (0.15, 0.15) |
| Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 75 | 1.28 (1.20, 1.36) |
| Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 75 | 7.57 (7.45, 7.69) |
| Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 127.29 (76.15, 212.77) |
| Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 3319.09 (2360.16, 4667.65) |
| Communities of Color | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 2224.20 (1531.96, 3229.24) |
| Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 311.04 (233.55, 414.23) |
| Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 120 | 465.54 (369.92, 585.87) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|-------|---------|---------------------|-------------------------|-----|------------------------|
| White Non-Hispanic | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 0.80 (0.80, 0.80) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 1.21 (1.21, 1.21) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 370 | 7.51 (7.51, 7.51) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 0.83 (0.79, 0.87) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 1.71 (1.48, 1.97) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 118 | 10.90 (9.44, 12.59) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 1.21 (1.21, 1.21) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|--------|---------|---------------------|-------------------------|-----|-----------------------------|
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 0.80 (0.80, 0.80) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 1.60 (1.40, 1.82) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 9.27 (8.31, 10.33) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 34.08 (26.39, 44.01) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 400.44 (330.41, 485.31) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 237.37 (204.22, 275.89) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 15.55 (13.64, 17.71) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 370 | 24.07 (21.54, 26.91) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 82.41 (56.70, 119.78) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 752.05 (520.11, 1087.41) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 513.05 (403.64, 652.12) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 33.13 (26.98, 40.67) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 118 | 52.80 (43.78, 63.69) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 1.22 (1.20, 1.24) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 26.72 (17.39, 41.07) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 267.93 (174.53, 411.31) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 182.62 (133.68, 249.48) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 11.37 (8.85, 14.60) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 20.09 (16.51, 24.45) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 136.02 (102.81, 179.97) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 3965.19 (3190.18, 4928.49) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 2905.77 (2384.91, 3540.40) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 355.22 (305.63, 412.85) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 370 | 506.55 (440.71, 582.22) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|--------------------|--------|---------|---------------------|-------------------------|-----|----------------------------------|
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 735.04 (440.86, 1225.53) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 17684.90 (12263.74, 25502.49) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 10349.34 (7588.49, 14114.66) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 1312.29 (957.88, 1797.84) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 118 | 1677.99 (1373.02, 2050.70) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.05) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 63 | 1.22 (1.20, 1.25) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 138.49 (81.68, 234.80) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 2844.53 (1856.90, 4357.44) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 2385.84 (1614.03, 3526.73) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 307.89 (235.98, 401.71) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 448.64 (360.71, 558.00) |

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 (BAU/ml) | 181 | 0.05 (0.05, 0.05) |
| Age < 65 Communities of Color | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 181 | 0.80 (0.80, 0.80) |
| Age < 65 Communities of Color | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 181 | 0.15 (0.15, 0.15) |
| Age < 65 Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 181 | 1.21 (1.21, 1.21) |
| Age < 65 Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 181 | 7.51 (7.51, 7.51) |
| Age < 65 Communities of Color | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 60 | 0.05 (0.05, 0.05) |
| Age < 65 Communities of Color | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 60 | 0.80 (0.80, 0.80) |
| Age < 65 Communities of Color | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 60 | 0.16 (0.15, 0.17) |
| Age < 65 Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 60 | 1.62 (1.40, 1.87) |
| Age < 65 Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 60 | 8.33 (7.62, 9.11) |
| Age < 65 Communities of Color | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0.05 (0.05, 0.05) |
| Age < 65 Communities of Color | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0.80 (0.80, 0.80) |
| Age < 65 Communities of Color | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 40 | 0.15 (0.15, 0.15) |
| Age < 65 Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 40 | 1.22 (1.20, 1.25) |
| Age < 65 Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 40 | 8.21 (7.44, 9.06) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------------------------------|--------|---------|---------------------|-------------------------|-----|-----------------------------|
| Age < 65 Communities of Color | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 62 | 0.05 (0.05, 0.06) |
| Age < 65 Communities of Color | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 62 | 0.80 (0.80, 0.80) |
| Age < 65 Communities of Color | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 62 | 0.16 (0.15, 0.16) |
| Age < 65 Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 62 | 1.68 (1.41, 2.00) |
| Age < 65 Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 62 | 10.95 (9.36, 12.81) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 181 | 40.76 (30.95, 53.67) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 181 | 479.15 (380.27, 603.74) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 181 | 248.38 (204.73, 301.33) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 181 | 18.82 (16.35, 21.67) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 181 | 27.06 (23.59, 31.03) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 60 | 64.06 (38.89, 105.52) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 60 | 786.45 (529.58, 1167.93) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 60 | 330.33 (243.57, 448.00) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 60 | 28.32 (21.73, 36.90) |
| Age < 65 Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 60 | 47.37 (37.42, 59.96) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age < 65 Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0.05 (0.05, 0.05) |
| Age < 65 Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0.80 (0.80, 0.80) |
| Age < 65 Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 40 | 0.15 (0.15, 0.15) |
| Age < 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 40 | 1.21 (1.21, 1.21) |
| Age < 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 40 | 7.51 (7.51, 7.51) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 62 | 21.81 (13.71, 34.71) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 62 | 266.59 (176.70, 402.20) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 62 | 118.20 (81.43, 171.57) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 62 | 10.05 (7.73, 13.05) |
| Age < 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 62 | 19.73 (16.09, 24.19) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 181 | 181.82 (128.01, 258.25) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 181 | 4576.25 (3579.40, 5850.72) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 181 | 3156.05 (2506.81, 3973.43) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 181 | 501.87 (424.02, 594.01) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 181 | 622.52 (528.99, 732.60) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-------------------------------|--------|---------|---------------------|-------------------------|----|---------------------------------|
| Age < 65 Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 60 | 439.21 (244.36, 789.44) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 60 | 11515.00 (7382.14, 17961.63) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 60 | 8880.91 (6021.62, 13097.90) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 60 | 1032.23 (769.96, 1383.86) |
| Age < 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 60 | 1290.56 (962.67, 1730.13) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 0.05 (0.05, 0.05) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 40 | 0.80 (0.80, 0.80) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 40 | 0.15 (0.15, 0.15) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 40 | 1.29 (1.18, 1.40) |
| Age < 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 40 | 7.51 (7.51, 7.51) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 62 | 99.31 (53.20, 185.39) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 62 | 2290.78 (1529.69, 3430.54) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 62 | 1577.94 (1007.97, 2470.22) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 62 | 264.11 (187.12, 372.78) |
| Age < 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 62 | 422.79 (318.67, 560.93) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------------------|-------|---------|---------------------|-------------------------|-----|------------------------|
| Age < 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 176 | 0.05 (0.05, 0.05) |
| Age < 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 176 | 0.80 (0.80, 0.80) |
| Age < 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 176 | 0.15 (0.15, 0.15) |
| Age < 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 176 | 1.21 (1.21, 1.21) |
| Age < 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 176 | 7.51 (7.51, 7.51) |
| Age < 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 54 | 0.05 (0.05, 0.05) |
| Age < 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 54 | 0.83 (0.78, 0.89) |
| Age < 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 54 | 0.15 (0.15, 0.15) |
| Age < 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 54 | 1.78 (1.49, 2.13) |
| Age < 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 54 | 11.55 (9.62, 13.87) |
| Age < 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 32 | 0.05 (0.05, 0.05) |
| Age < 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 32 | 0.80 (0.80, 0.80) |
| Age < 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 32 | 0.15 (0.15, 0.15) |
| Age < 65 White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 32 | 1.21 (1.21, 1.21) |
| Age < 65 White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 32 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------------------|--------|---------|---------------------|-------------------------|-----|----------------------------|
| Age < 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) |
| Age < 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.80 (0.80, 0.80) |
| Age < 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) |
| Age < 65 White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.59 (1.35, 1.87) |
| Age < 65 White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 9.36 (8.19, 10.69) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 176 | 24.32 (17.76, 33.29) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 176 | 287.61 (227.68, 363.32) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 176 | 168.88 (140.99, 202.30) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 176 | 13.05 (11.12, 15.32) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 176 | 21.20 (18.50, 24.30) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 54 | 64.43 (40.45, 102.62) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 54 | 514.72 (325.06, 815.04) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 54 | 371.84 (277.65, 497.98) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 54 | 28.84 (22.32, 37.25) |
| Age < 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 54 | 49.61 (39.32, 62.60) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/ml) | 32 | 0.05 (0.05, 0.05) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 32 | 0.80 (0.80, 0.80) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 32 | 0.15 (0.15, 0.15) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 32 | 1.21 (1.21, 1.21) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 32 | 7.51 (7.51, 7.51) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 20.11 (11.86, 34.13) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 192.98 (113.92, 326.90) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 133.37 (91.19, 195.06) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 9.82 (7.20, 13.40) |
| Age < 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 18.24 (14.33, 23.23) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 176 | 92.65 (65.76, 130.55) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 176 | 2660.00 (2042.25, 3464.59) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 176 | 1914.52 (1506.58, 2432.91) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 176 | 278.35 (231.74, 334.33) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 176 | 445.02 (375.02, 528.09) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------------------|--------|---------|---------------------|-------------------------|----|---------------------------------|
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 54 | 523.26 (276.02, 991.96) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 54 | 12694.31 (8088.43, 19922.98) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 54 | 7479.68 (5101.02, 10967.54) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 54 | 1099.25 (740.37, 1632.09) |
| Age < 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 54 | 1562.37 (1219.05, 2002.37) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 32 | 0.05 (0.05, 0.05) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 32 | 0.80 (0.80, 0.80) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 32 | 0.15 (0.15, 0.15) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 32 | 1.21 (1.21, 1.21) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 32 | 7.51 (7.51, 7.51) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 104.39 (54.65, 199.40) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 1855.13 (1102.73, 3120.92) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 1597.52 (992.02, 2572.62) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 251.25 (181.38, 348.03) |
| Age < 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 411.10 (314.50, 537.38) |

(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 (BAU/ml) | 196 | 0.05 (0.05, 0.05) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 0.80 (0.80, 0.80) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 0.15 (0.15, 0.15) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 1.21 (1.21, 1.21) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 196 | 7.51 (7.51, 7.51) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 0.05 (0.05, 0.05) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 0.80 (0.80, 0.80) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 0.15 (0.15, 0.15) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 1.60 (1.36, 1.89) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 56 | 9.84 (8.49, 11.39) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0.05 (0.05, 0.05) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0.80 (0.80, 0.80) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0.15 (0.15, 0.15) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 35 | 1.21 (1.21, 1.21) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 35 | 7.65 (7.38, 7.92) |

(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 (BAU/ml) | 58 | 0.05 (0.05, 0.06) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.83 (0.78, 0.88) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.71 (1.45, 2.01) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 9.51 (8.23, 10.99) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 85.51 (68.12, 107.32) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 1367.10 (1120.52, 1667.95) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 718.28 (608.48, 847.90) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 26.06 (22.95, 29.59) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 196 | 36.31 (31.75, 41.53) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 240.37 (149.08, 387.55) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 2915.65 (1928.59, 4407.89) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 1354.33 (1009.85, 1816.33) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 57.31 (44.38, 73.99) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 56 | 57.61 (45.41, 73.08) |

(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 (BAU/ml) | 35 | 0.05 (0.05, 0.05) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0.80 (0.80, 0.80) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0.15 (0.15, 0.15) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 35 | 1.21 (1.21, 1.21) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 35 | 7.51 (7.51, 7.51) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 74.69 (50.19, 111.13) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 1072.80 (748.14, 1538.36) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 463.24 (352.22, 609.26) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 18.83 (15.12, 23.46) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 23.23 (18.67, 28.90) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 509.74 (377.39, 688.51) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 17397.22 (13573.73, 22297.71) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 11229.81 (9207.59, 13696.17) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 763.94 (641.68, 909.50) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 196 | 794.07 (687.17, 917.59) |

(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 (BAU/ml) | 56 | 1488.93 (859.44, 2579.47) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 60111.35 (40246.72, 89780.62) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 35635.46 (24143.48, 52597.47) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 2238.45 (1675.95, 2989.74) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 56 | 2135.17 (1598.70, 2851.65) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 0.05 (0.05, 0.05) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 35 | 0.80 (0.80, 0.80) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 35 | 0.15 (0.15, 0.15) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 35 | 1.26 (1.19, 1.33) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 35 | 7.73 (7.30, 8.18) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 341.70 (208.05, 561.20) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 14505.10 (9439.81, 22288.36) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 8712.33 (6274.68, 12097.00) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 596.13 (446.31, 796.24) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 682.84 (543.58, 857.77) |

(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 (BAU/ml) | 194 | 0.05 (0.05, 0.05) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 0.80 (0.80, 0.80) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 0.15 (0.15, 0.15) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 1.21 (1.21, 1.21) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 194 | 7.51 (7.51, 7.51) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 64 | 0.05 (0.05, 0.05) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 64 | 0.80 (0.80, 0.80) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 64 | 0.15 (0.15, 0.15) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 64 | 1.48 (1.30, 1.67) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 64 | 8.93 (8.10, 9.84) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0.05 (0.05, 0.05) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0.80 (0.80, 0.80) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0.15 (0.15, 0.15) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 31 | 1.21 (1.21, 1.21) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 31 | 7.51 (7.51, 7.51) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------------|
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.05) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 1.63 (1.43, 1.85) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 8.94 (7.89, 10.14) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 123.31 (96.30, 157.89) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 1412.35 (1141.70, 1747.16) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 867.91 (724.66, 1039.47) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 30.24 (26.67, 34.29) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 194 | 39.02 (34.58, 44.03) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 64 | 193.76 (131.26, 286.01) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 64 | 2806.76 (2061.51, 3821.41) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 64 | 1569.51 (1213.12, 2030.60) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 64 | 53.62 (43.78, 65.66) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 64 | 65.59 (52.60, 81.78) |

(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 (BAU/ml) | 31 | 0.05 (0.05, 0.05) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0.80 (0.80, 0.80) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0.15 (0.15, 0.15) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID50 | 31 | 1.25 (1.17, 1.34) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 31 | 7.51 (7.51, 7.51) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 77.42 (51.70, 115.94) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 915.81 (627.71, 1336.14) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 592.74 (452.27, 776.85) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 19.63 (16.06, 24.00) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 28.80 (23.45, 35.37) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 587.10 (439.80, 783.73) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 18139.10 (14345.34, 22936.16) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 14236.08 (11584.07, 17495.23) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 899.16 (765.84, 1055.68) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 194 | 829.50 (719.17, 956.76) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | GMT/GMC |
|-----------------------------|--------|---------|---------------------|-------------------------|----|----------------------------------|
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 64 | 2393.12 (1477.83, 3875.29) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 64 | 55942.36 (36988.10, 84609.57) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 64 | 31971.03 (23196.84, 44064.05) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 64 | 2428.01 (1824.93, 3230.40) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 64 | 2150.25 (1684.59, 2744.63) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0.05 (0.05, 0.05) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0.80 (0.80, 0.80) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0.15 (0.15, 0.15) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID50 | 31 | 1.26 (1.16, 1.38) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 31 | 7.51 (7.51, 7.51) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 399.18 (225.22, 707.51) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 14104.09 (9867.31, 20160.04) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 10718.36 (7686.05, 14946.97) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 659.35 (509.51, 853.25) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 622.36 (487.13, 795.13) |

2.8 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 (BAU/ml) | 747 | 0.05 (0.05, 0.05) | 39.38 (33.04, 46.94) | 18.71 (15.95, 21.95) |
| | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 747 | 0.80 (0.80, 0.80) | 476.21 (415.28, 546.08) | 277.97 (242.41, 318.76) |
| | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 747 | 0.15 (0.15, 0.15) | 266.96 (239.24, 297.88) | 297.15 (266.30, 331.57) |
| | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 747 | 1.21 (1.21, 1.21) | 17.38 (15.88, 19.02) | 7.61 (6.94, 8.36) |
| | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 747 | 7.51 (7.51, 7.51) | 26.00 (24.01, 28.15) | 2.42 (2.25, 2.61) |
| | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 234 | 0.05 (0.05, 0.05) | 81.71 (61.73, 108.16) | 36.31 (27.35, 48.20) |
| | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 234 | 0.81 (0.79, 0.84) | 842.22 (650.71, 1090.08) | 487.76 (377.03, 631.02) |
| | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 234 | 0.16 (0.15, 0.16) | 473.58 (396.77, 565.26) | 527.14 (441.64, 629.19) |
| | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 234 | 1.67 (1.51, 1.84) | 32.67 (28.06, 38.03) | 13.04 (11.14, 15.27) |
| | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 234 | 9.87 (9.00, 10.83) | 51.20 (44.63, 58.75) | 4.03 (3.46, 4.69) |
| | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 138 | 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 (BAU/ml) | 138 | 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 |
|-------|-----------------------|---------|---------------------|-------------------------|-----|-----------------------|----------------------------------|--------------------------------|
| | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 138 | 0.15 (0.15, 0.15) | 0.15 (0.15, 0.15) | 1.00 (1.00, 1.00) |
| | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID50 | 138 | 1.21 (1.21, 1.22) | 1.22 (1.20, 1.23) | 1.00 (1.00, 1.00) |
| | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 138 | 7.72 (7.51, 7.95) | 7.51 (7.51, 7.51) | 0.99 (0.98, 1.01) |
| | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 241 | 0.05 (0.05, 0.05) | 27.27 (20.41, 36.44) | 12.69 (9.65, 16.69) |
| | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 241 | 0.80 (0.80, 0.80) | 303.87 (230.21, 401.11) | 177.38 (134.38, 234.13) |
| | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 241 | 0.15 (0.15, 0.16) | 169.66 (136.33, 211.14) | 188.85 (151.75, 235.02) |
| | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 241 | 1.64 (1.49, 1.80) | 11.38 (9.63, 13.45) | 4.61 (3.93, 5.41) |
| | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 241 | 9.87 (9.08, 10.74) | 20.22 (17.73, 23.07) | 1.68 (1.48, 1.90) |
| | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 747 | 0.05 (0.05, 0.05) | 169.29 (138.13, 207.49) | 77.17 (63.42, 93.90) |
| | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 747 | 0.80 (0.80, 0.80) | 4768.44 (4097.10, 5549.78) | 2783.43 (2391.56, 3239.52) |
| | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 747 | 0.15 (0.15, 0.15) | 3384.52 (2945.38, 3889.12) | 3767.27 (3278.48, 4328.94) |
| | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 747 | 1.21 (1.21, 1.21) | 427.80 (384.20, 476.35) | 191.11 (171.63, 212.80) |
| | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 747 | 7.51 (7.51, 7.51) | 565.58 (512.62, 624.02) | 52.66 (47.73, 58.11) |
| | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 234 | 0.05 (0.05, 0.05) | 648.88 (451.21, 933.14) | 286.67 (198.52, 413.96) |
| | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 234 | 0.81 (0.79, 0.84) | 16689.18 (12811.64, 21740.29) | 9665.37 (7422.46, 12586.05) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------|-----------------------|---------|---------------------|-------------------------|-----|-----------------------|---------------------------------|---------------------------------|
| | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 234 | 0.16 (0.15, 0.16) | 10741.38 (8558.81, 13480.53) | 11956.12 (9526.72, 15005.04) |
| | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 234 | 1.67 (1.51, 1.84) | 1256.68 (1017.71, 1551.75) | 502.30 (407.43, 619.27) |
| | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 234 | 9.87 (9.00, 10.83) | 1561.17 (1336.08, 1824.18) | 125.94 (107.79, 147.15) |
| | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 138 | 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 (BAU/ml) | 138 | 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 (BAU/ml) | 138 | 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 cID50 | 138 | 1.21 (1.21, 1.22) | 1.25 (1.21, 1.28) | 1.00 (1.00, 1.01) |
| | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 138 | 7.72 (7.51, 7.95) | 7.54 (7.49, 7.58) | 0.99 (0.98, 1.01) |
| | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 241 | 0.05 (0.05, 0.05) | 133.24 (92.21, 192.52) | 59.99 (41.73, 86.24) |
| | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 241 | 0.80 (0.80, 0.80) | 3052.94 (2308.16, 4038.04) | 1782.06 (1347.32, 2357.08) |
| | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 241 | 0.15 (0.15, 0.16) | 2310.36 (1764.78, 3024.62) | 2571.64 (1964.35, 3366.67) |
| | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 241 | 1.64 (1.49, 1.80) | 309.33 (255.18, 374.97) | 125.02 (103.14, 151.55) |
| | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 241 | 9.87 (9.08, 10.74) | 456.31 (389.81, 534.14) | 37.15 (31.88, 43.28) |

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 (BAU/ml) | 357 | 0.05 (0.05, 0.05) | 30.25 (24.33, 37.60) | 14.67 (12.05, 17.86) |
| Age < 65 | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 357 | 0.80 (0.80, 0.80) | 356.86 (301.49, 422.39) | 208.31 (175.99, 246.56) |
| Age < 65 | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 357 | 0.15 (0.15, 0.15) | 198.79 (173.81, 227.36) | 221.27 (193.47, 253.07) |
| Age < 65 | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 357 | 1.21 (1.21, 1.21) | 15.24 (13.63, 17.04) | 6.64 (5.92, 7.46) |
| Age < 65 | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 357 | 7.51 (7.51, 7.51) | 23.51 (21.31, 25.93) | 2.20 (2.00, 2.41) |
| Age < 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 114 | 0.05 (0.05, 0.05) | 64.27 (45.66, 90.47) | 28.54 (20.20, 40.32) |
| Age < 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 114 | 0.82 (0.79, 0.85) | 617.21 (450.57, 845.49) | 356.74 (260.59, 488.36) |
| Age < 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 114 | 0.16 (0.15, 0.16) | 353.46 (285.77, 437.17) | 393.43 (318.09, 486.61) |
| Age < 65 | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 114 | 1.71 (1.52, 1.93) | 28.61 (23.76, 34.45) | 11.35 (9.37, 13.76) |
| Age < 65 | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 114 | 10.04 (8.96, 11.26) | 48.64 (41.15, 57.48) | 3.77 (3.13, 4.53) |
| Age < 65 | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 72 | 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 (BAU/ml) | 72 | 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 (BAU/ml) | 72 | 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 cID50 | 72 | 1.21 (1.21, 1.22) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age < 65 | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 72 | 7.78 (7.49, 8.08) | 7.51 (7.51, 7.51) | 0.99 (0.97, 1.01) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------|-----------------------|---------|---------------------|-------------------------|-----|------------------------|---------------------------------|--------------------------------|
| Age < 65 | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 0.05 (0.05, 0.05) | 20.88 (14.63, 29.80) | 9.85 (7.05, 13.77) |
| Age < 65 | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 0.80 (0.80, 0.80) | 224.00 (159.42, 314.74) | 130.75 (93.06, 183.72) |
| Age < 65 | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 0.15 (0.15, 0.16) | 126.14 (96.53, 164.83) | 140.41 (107.45, 183.47) |
| Age < 65 | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 1.63 (1.45, 1.84) | 9.92 (8.08, 12.19) | 4.03 (3.31, 4.91) |
| Age < 65 | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 120 | 10.06 (9.08, 11.15) | 18.92 (16.11, 22.22) | 1.56 (1.34, 1.81) |
| Age < 65 | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 357 | 0.05 (0.05, 0.05) | 123.20 (95.80, 158.44) | 56.54 (44.38, 72.02) |
| Age < 65 | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 357 | 0.80 (0.80, 0.80) | 3345.62 (2777.00, 4030.66) | 1952.90 (1620.99, 2352.78) |
| Age < 65 | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 357 | 0.15 (0.15, 0.15) | 2364.92 (1992.88, 2806.42) | 2632.37 (2218.25, 3123.80) |
| Age < 65 | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 357 | 1.21 (1.21, 1.21) | 357.11 (312.83, 407.65) | 159.53 (139.75, 182.11) |
| Age < 65 | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 357 | 7.51 (7.51, 7.51) | 512.86 (454.13, 579.18) | 47.76 (42.29, 53.93) |
| Age < 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 114 | 0.05 (0.05, 0.05) | 485.45 (311.29, 757.03) | 214.02 (136.51, 335.52) |
| Age < 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 114 | 0.82 (0.79, 0.85) | 12175.02 (8842.14, 16764.17) | 7036.87 (5113.19, 9684.29) |
| Age < 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 114 | 0.16 (0.15, 0.16) | 8050.61 (6114.49, 10599.79) | 8961.05 (6805.98, 11798.52) |
| Age < 65 | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 114 | 1.71 (1.52, 1.93) | 1070.02 (826.48, 1385.33) | 425.27 (329.26, 549.27) |
| Age < 65 | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 114 | 10.04 (8.96, 11.26) | 1439.55 (1191.48, 1739.25) | 114.50 (94.78, 138.33) |

(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 (BAU/ml) | 72 | 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 (BAU/ml) | 72 | 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 (BAU/ml) | 72 | 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 cID50 | 72 | 1.21 (1.21, 1.22) | 1.24 (1.20, 1.28) | 1.00 (1.00, 1.00) |
| Age < 65 | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 72 | 7.78 (7.49, 8.08) | 7.51 (7.51, 7.51) | 0.99 (0.97, 1.01) |
| Age < 65 | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 0.05 (0.05, 0.05) | 102.01 (64.98, 160.15) | 45.98 (29.48, 71.72) |
| Age < 65 | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 0.80 (0.80, 0.80) | 2044.73 (1455.28, 2872.94) | 1193.55 (849.47, 1676.99) |
| Age < 65 | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 0.15 (0.15, 0.16) | 1588.46 (1142.67, 2208.16) | 1768.10 (1271.90, 2457.88) |
| Age < 65 | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 1.63 (1.45, 1.84) | 257.10 (203.12, 325.43) | 104.05 (82.18, 131.75) |
| Age < 65 | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 120 | 10.06 (9.08, 11.15) | 416.45 (343.36, 505.10) | 33.80 (28.02, 40.77) |
| Age ≥ 65 | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 390 | 0.05 (0.05, 0.05) | 105.10 (88.47, 124.86) | 46.30 (38.87, 55.15) |
| Age ≥ 65 | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 390 | 0.80 (0.80, 0.80) | 1392.43 (1200.78, 1614.67) | 812.79 (700.92, 942.52) |
| Age ≥ 65 | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 390 | 0.15 (0.15, 0.15) | 799.13 (705.06, 905.76) | 889.51 (784.80, 1008.19) |
| Age ≥ 65 | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 390 | 1.21 (1.21, 1.21) | 28.34 (25.89, 31.02) | 12.63 (11.53, 13.83) |
| Age ≥ 65 | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 390 | 7.51 (7.51, 7.51) | 37.82 (34.56, 41.37) | 3.47 (3.18, 3.80) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------|-----------------------|---------|---------------------|-------------------------|-----|-----------------------|-------------------------------|-------------------------------|
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 120 | 0.05 (0.05, 0.05) | 209.19 (154.61, 283.03) | 93.19 (68.87, 126.08) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 120 | 0.80 (0.80, 0.80) | 2844.99 (2222.07, 3642.53) | 1660.68 (1297.07, 2126.22) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 120 | 0.15 (0.15, 0.15) | 1489.36 (1223.39, 1813.16) | 1657.79 (1361.74, 2018.21) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 120 | 1.52 (1.37, 1.68) | 54.90 (46.83, 64.36) | 22.44 (19.08, 26.39) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 120 | 9.24 (8.52, 10.03) | 62.63 (53.04, 73.97) | 5.25 (4.42, 6.24) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 66 | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 66 | 0.80 (0.80, 0.80) | 0.80 (0.80, 0.80) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 66 | 0.15 (0.15, 0.15) | 0.15 (0.15, 0.15) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID50 | 66 | 1.21 (1.21, 1.21) | 1.23 (1.19, 1.28) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 66 | 7.57 (7.45, 7.70) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 0.05 (0.05, 0.05) | 76.19 (57.27, 101.36) | 33.66 (25.25, 44.88) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 0.81 (0.79, 0.84) | 982.84 (754.71, 1279.93) | 573.70 (440.54, 747.12) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 0.15 (0.15, 0.15) | 530.97 (437.49, 644.42) | 591.02 (486.97, 717.30) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 1.66 (1.50, 1.84) | 19.27 (16.61, 22.35) | 7.73 (6.68, 8.94) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 9.19 (8.36, 10.11) | 26.17 (22.51, 30.42) | 2.20 (1.90, 2.55) |

(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 | Vaccine | Negative | Anti N IgG (BAU/ml) | 390 | 0.05 (0.05, 0.05) | 552.00 (447.81, 680.43) | 245.38 (198.94, 302.66) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 390 | 0.80 (0.80, 0.80) | 17811.61 (15012.46, 21132.68) | 10397.00 (8763.07, 12335.57) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 390 | 0.15 (0.15, 0.15) | 12836.45 (11096.62, 14849.05) | 14288.12 (12351.54, 16528.33) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 390 | 1.21 (1.21, 1.21) | 837.45 (743.98, 942.66) | 374.11 (332.36, 421.11) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 390 | 7.51 (7.51, 7.51) | 813.85 (734.70, 901.52) | 75.78 (68.41, 83.95) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 120 | 0.05 (0.05, 0.05) | 2021.65 (1395.66, 2928.42) | 900.57 (621.71, 1304.51) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 120 | 0.80 (0.80, 0.80) | 57390.09 (42425.39, 77633.31) | 33499.75 (24764.55, 45316.12) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 120 | 0.15 (0.15, 0.15) | 33228.31 (25909.63, 42614.29) | 36986.10 (28839.75, 47433.54) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 120 | 1.52 (1.37, 1.68) | 2358.86 (1909.82, 2913.48) | 964.12 (776.47, 1197.12) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 120 | 9.24 (8.52, 10.03) | 2144.88 (1777.29, 2588.48) | 182.87 (151.86, 220.22) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 66 | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 66 | 0.80 (0.80, 0.80) | 0.80 (0.80, 0.80) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 66 | 0.15 (0.15, 0.15) | 0.15 (0.15, 0.15) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID50 | 66 | 1.21 (1.21, 1.21) | 1.26 (1.20, 1.33) | 1.01 (0.99, 1.04) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 66 | 7.57 (7.45, 7.70) | 7.61 (7.41, 7.81) | 1.01 (0.99, 1.03) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------|-----------------------|---------|---------------------|-------------------------|-----|-----------------------|----------------------------------|---------------------------------|
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 0.05 (0.05, 0.05) | 372.41 (252.92, 548.36) | 166.99 (113.82, 245.00) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 0.81 (0.79, 0.84) | 14281.73 (10842.90, 18811.19) | 8336.53 (6329.22, 10980.47) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 0.15 (0.15, 0.15) | 9771.25 (7721.56, 12365.03) | 10876.29 (8594.80, 13763.40) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 1.66 (1.50, 1.84) | 630.33 (519.76, 764.44) | 253.43 (209.89, 306.01) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 9.19 (8.36, 10.11) | 648.67 (547.29, 768.82) | 53.41 (45.41, 62.83) |

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 (BAU/ml) | 381 | 0.05 (0.05, 0.05) | 40.32 (33.02, 49.23) | 18.58 (15.41, 22.41) |
| At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 381 | 0.80 (0.80, 0.80) | 516.91 (434.48, 614.97) | 301.73 (253.62, 358.97) |
| At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 381 | 0.15 (0.15, 0.15) | 294.81 (255.35, 340.37) | 328.15 (284.23, 378.86) |
| At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 381 | 1.21 (1.21, 1.21) | 18.02 (16.26, 19.98) | 7.97 (7.18, 8.84) |
| At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 381 | 7.51 (7.51, 7.51) | 27.52 (24.95, 30.36) | 2.60 (2.37, 2.85) |
| At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 111 | 0.05 (0.05, 0.05) | 72.75 (49.40, 107.15) | 33.07 (22.65, 48.28) |
| At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 111 | 0.82 (0.77, 0.88) | 875.73 (634.67, 1208.35) | 500.02 (363.38, 688.04) |
| At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 111 | 0.15 (0.15, 0.15) | 577.86 (452.58, 737.83) | 643.22 (503.76, 821.27) |
| At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 111 | 1.57 (1.40, 1.76) | 32.53 (26.65, 39.71) | 13.46 (10.98, 16.51) |
| At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 111 | 9.36 (8.35, 10.48) | 49.96 (40.47, 61.68) | 4.24 (3.51, 5.13) |
| At-risk | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 71 | 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 (BAU/ml) | 71 | 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 (BAU/ml) | 71 | 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 cID50 | 71 | 1.22 (1.20, 1.24) | 1.22 (1.20, 1.25) | 1.00 (1.00, 1.00) |
| At-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 71 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 (BAU/ml) | 117 | 0.05 (0.05, 0.05) | 39.07 (27.06, 56.40) | 17.61 (12.32, 25.16) |
| At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 117 | 0.80 (0.79, 0.81) | 399.73 (291.24, 548.63) | 233.33 (170.00, 320.24) |
| At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 117 | 0.16 (0.15, 0.16) | 230.58 (178.83, 297.31) | 256.66 (199.06, 330.93) |
| At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 117 | 1.53 (1.38, 1.69) | 13.89 (11.24, 17.17) | 5.61 (4.50, 7.00) |
| At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 117 | 10.00 (8.97, 11.14) | 21.72 (18.34, 25.72) | 1.82 (1.59, 2.10) |
| At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 381 | 0.05 (0.05, 0.05) | 175.84 (138.12, 223.86) | 79.05 (62.39, 100.15) |
| At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 381 | 0.80 (0.80, 0.80) | 5606.18 (4585.35, 6854.28) | 3272.44 (2676.56, 4000.98) |
| At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 381 | 0.15 (0.15, 0.15) | 3919.84 (3269.77, 4699.17) | 4363.14 (3639.54, 5230.60) |
| At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 381 | 1.21 (1.21, 1.21) | 468.02 (411.38, 532.45) | 209.08 (183.77, 237.86) |
| At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 381 | 7.51 (7.51, 7.51) | 614.23 (547.72, 688.82) | 57.19 (51.00, 64.14) |
| At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 111 | 0.05 (0.05, 0.05) | 681.83 (436.93, 1064.01) | 301.87 (192.91, 472.38) |
| At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 111 | 0.82 (0.77, 0.88) | 15742.11 (11096.03, 22333.56) | 8988.39 (6348.75, 12725.53) |
| At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 111 | 0.15 (0.15, 0.15) | 12327.67 (9020.42, 16847.51) | 13721.81 (10040.54, 18752.79) |
| At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 111 | 1.57 (1.40, 1.76) | 1375.89 (1057.21, 1790.64) | 571.44 (435.76, 749.38) |
| At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 111 | 9.36 (8.35, 10.48) | 1593.34 (1280.14, 1983.16) | 131.75 (107.04, 162.17) |

(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 (BAU/ml) | 71 | 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 (BAU/ml) | 71 | 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 (BAU/ml) | 71 | 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 cID50 | 71 | 1.22 (1.20, 1.24) | 1.26 (1.19, 1.35) | 1.01 (0.99, 1.03) |
| At-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 71 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 117 | 0.05 (0.05, 0.05) | 191.20 (125.62, 291.02) | 83.77 (54.60, 128.52) |
| At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 117 | 0.80 (0.79, 0.81) | 4423.09 (3257.84, 6005.14) | 2581.85 (1901.66, 3505.32) |
| At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 117 | 0.16 (0.15, 0.16) | 3158.86 (2281.20, 4374.18) | 3516.10 (2539.18, 4868.86) |
| At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 117 | 1.53 (1.38, 1.69) | 351.46 (273.50, 451.64) | 145.54 (112.42, 188.43) |
| At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 117 | 10.00 (8.97, 11.14) | 399.37 (320.90, 497.03) | 32.03 (26.11, 39.28) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 366 | 0.05 (0.05, 0.05) | 38.84 (30.11, 50.10) | 18.79 (14.93, 23.65) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 366 | 0.80 (0.80, 0.80) | 453.52 (373.62, 550.49) | 264.73 (218.09, 321.33) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 366 | 0.15 (0.15, 0.15) | 251.64 (215.64, 293.64) | 280.10 (240.03, 326.85) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 366 | 1.21 (1.21, 1.21) | 17.01 (14.92, 19.38) | 7.41 (6.47, 8.48) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 366 | 7.51 (7.51, 7.51) | 25.13 (22.44, 28.14) | 2.32 (2.09, 2.58) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------------|-----------------------|---------|---------------------|-------------------------|-----|------------------------|-----------------------------|----------------------------|
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 123 | 0.05 (0.05, 0.05) | 87.15 (59.57, 127.48) | 38.24 (25.94, 56.38) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 123 | 0.81 (0.79, 0.83) | 824.18 (574.54, 1182.28) | 481.09 (335.37, 690.12) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 123 | 0.16 (0.15, 0.16) | 424.06 (333.14, 539.80) | 472.02 (370.81, 600.84) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 123 | 1.73 (1.50, 1.98) | 32.75 (26.56, 40.38) | 12.81 (10.30, 15.93) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 123 | 10.17 (8.94, 11.58) | 51.91 (43.40, 62.08) | 3.92 (3.17, 4.84) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 67 | 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 (BAU/ml) | 67 | 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 (BAU/ml) | 67 | 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 cID50 | 67 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 67 | 7.86 (7.50, 8.23) | 7.51 (7.51, 7.51) | 0.99 (0.96, 1.01) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 124 | 0.05 (0.05, 0.05) | 22.29 (14.89, 33.35) | 10.56 (7.23, 15.42) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 124 | 0.80 (0.79, 0.81) | 260.53 (175.30, 387.19) | 152.08 (102.33, 226.01) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 124 | 0.15 (0.15, 0.15) | 142.82 (104.63, 194.96) | 158.97 (116.46, 217.01) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 124 | 1.70 (1.48, 1.96) | 10.17 (8.07, 12.83) | 4.13 (3.32, 5.13) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 124 | 9.81 (8.74, 11.01) | 19.43 (16.19, 23.32) | 1.60 (1.34, 1.91) |

(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 (BAU/ml) | 366 | 0.05 (0.05, 0.05) | 165.51 (123.58, 221.68) | 76.07 (57.45, 100.72) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 366 | 0.80 (0.80, 0.80) | 4330.32 (3501.86, 5354.77) | 2527.69 (2044.11, 3125.69) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 366 | 0.15 (0.15, 0.15) | 3101.15 (2549.75, 3771.78) | 3451.85 (2838.10, 4198.33) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 366 | 1.21 (1.21, 1.21) | 405.51 (347.62, 473.04) | 181.15 (155.29, 211.32) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 366 | 7.51 (7.51, 7.51) | 538.46 (467.44, 620.28) | 50.14 (43.53, 57.76) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 123 | 0.05 (0.05, 0.05) | 631.28 (379.42, 1050.35) | 278.57 (166.36, 466.46) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 123 | 0.81 (0.79, 0.83) | 17239.12 (11977.96, 24811.18) | 10062.82 (6991.78, 14482.78) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 123 | 0.16 (0.15, 0.16) | 9950.91 (7303.49, 13557.98) | 11076.26 (8129.44, 15091.25) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 123 | 1.73 (1.50, 1.98) | 1195.03 (890.64, 1603.47) | 467.61 (350.24, 624.32) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 123 | 10.17 (8.94, 11.58) | 1543.60 (1251.74, 1903.51) | 122.83 (99.27, 151.99) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 67 | 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 (BAU/ml) | 67 | 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 (BAU/ml) | 67 | 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 cID50 | 67 | 1.21 (1.21, 1.21) | 1.23 (1.20, 1.27) | 1.00 (1.00, 1.00) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 67 | 7.86 (7.50, 8.23) | 7.55 (7.47, 7.63) | 0.99 (0.97, 1.02) |

(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 (BAU/ml) | 124 | 0.05 (0.05, 0.05) | 108.79 (64.41, 183.76) | 49.74 (29.77, 83.12) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 124 | 0.80 (0.79, 0.81) | 2479.40 (1657.15, 3709.64) | 1447.28 (967.31, 2165.39) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 124 | 0.15 (0.15, 0.15) | 1938.34 (1324.99, 2835.62) | 2157.55 (1474.83, 3156.30) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 124 | 1.70 (1.48, 1.96) | 287.94 (220.69, 375.68) | 114.80 (88.19, 149.44) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 124 | 9.81 (8.74, 11.01) | 491.75 (397.36, 608.56) | 40.37 (32.74, 49.78) |

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 (BAU/ml) | 185 | 0.05 (0.05, 0.05) | 27.71 (21.41, 35.84) | 13.02 (10.26, 16.52) |
| Age < 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 185 | 0.80 (0.80, 0.80) | 349.87 (279.45, 438.03) | 204.23 (163.12, 255.69) |
| Age < 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 185 | 0.15 (0.15, 0.15) | 199.73 (166.21, 240.01) | 222.31 (185.00, 267.15) |
| Age < 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 185 | 1.21 (1.21, 1.21) | 15.18 (13.27, 17.35) | 6.69 (5.84, 7.65) |
| Age < 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 185 | 7.51 (7.51, 7.51) | 24.27 (21.38, 27.56) | 2.30 (2.05, 2.59) |
| Age < 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 0.05 (0.05, 0.05) | 48.62 (29.53, 80.04) | 22.26 (13.69, 36.20) |
| Age < 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 0.83 (0.76, 0.91) | 555.52 (371.70, 830.23) | 314.59 (211.51, 467.92) |
| Age < 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 0.15 (0.15, 0.15) | 381.68 (284.39, 512.26) | 424.85 (316.55, 570.20) |
| Age < 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 1.59 (1.38, 1.84) | 26.59 (20.62, 34.29) | 11.08 (8.54, 14.39) |
| Age < 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 56 | 9.39 (8.08, 10.90) | 43.84 (33.39, 57.55) | 3.74 (2.94, 4.75) |
| Age < 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 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 (BAU/ml) | 36 | 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 (BAU/ml) | 36 | 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 cID50 | 36 | 1.22 (1.20, 1.25) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age < 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 36 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 (BAU/ml) | 59 | 0.05 (0.05, 0.05) | 30.34 (18.77, 49.04) | 13.89 (8.73, 22.08) |
| Age < 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 59 | 0.80 (0.80, 0.80) | 290.24 (193.43, 435.51) | 169.42 (112.91, 254.22) |
| Age < 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 59 | 0.16 (0.15, 0.16) | 163.09 (117.48, 226.43) | 181.54 (130.76, 252.03) |
| Age < 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 59 | 1.48 (1.30, 1.69) | 12.23 (9.23, 16.21) | 4.93 (3.67, 6.61) |
| Age < 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 59 | 10.31 (8.97, 11.86) | 21.07 (16.95, 26.19) | 1.77 (1.48, 2.11) |
| Age < 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 185 | 0.05 (0.05, 0.05) | 114.61 (83.79, 156.78) | 51.78 (38.14, 70.31) |
| Age < 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 185 | 0.80 (0.80, 0.80) | 3684.93 (2839.16, 4782.66) | 2150.97 (1657.27, 2791.74) |
| Age < 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 185 | 0.15 (0.15, 0.15) | 2411.71 (1908.81, 3047.12) | 2684.45 (2124.67, 3391.72) |
| Age < 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 185 | 1.21 (1.21, 1.21) | 368.01 (311.75, 434.43) | 164.40 (139.27, 194.07) |
| Age < 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 185 | 7.51 (7.51, 7.51) | 555.98 (479.07, 645.23) | 51.77 (44.61, 60.08) |
| Age < 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 0.05 (0.05, 0.05) | 411.63 (236.09, 717.69) | 181.83 (103.87, 318.30) |
| Age < 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 0.83 (0.76, 0.91) | 9098.59 (5981.40, 13840.28) | 5152.61 (3400.81, 7806.80) |
| Age < 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 0.15 (0.15, 0.15) | 8014.18 (5452.45, 11779.48) | 8920.50 (6069.07, 13111.62) |
| Age < 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 1.59 (1.38, 1.84) | 1047.93 (752.94, 1458.49) | 438.99 (312.23, 617.20) |
| Age < 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 56 | 9.39 (8.08, 10.90) | 1411.41 (1070.84, 1860.31) | 114.95 (88.44, 149.41) |

(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 (BAU/ml) | 36 | 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 (BAU/ml) | 36 | 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 (BAU/ml) | 36 | 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 cID50 | 36 | 1.22 (1.20, 1.25) | 1.26 (1.16, 1.37) | 1.00 (1.00, 1.00) |
| Age < 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 36 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age < 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 59 | 0.05 (0.05, 0.05) | 160.93 (92.55, 279.82) | 70.06 (39.83, 123.21) |
| Age < 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 59 | 0.80 (0.80, 0.80) | 2810.16 (1910.33, 4133.85) | 1640.35 (1115.10, 2413.01) |
| Age < 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 59 | 0.16 (0.15, 0.16) | 2081.83 (1367.84, 3168.51) | 2317.26 (1522.52, 3526.84) |
| Age < 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 59 | 1.48 (1.30, 1.69) | 289.96 (209.02, 402.23) | 120.61 (85.96, 169.24) |
| Age < 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 59 | 10.31 (8.97, 11.86) | 335.47 (251.88, 446.80) | 26.66 (20.45, 34.76) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 172 | 0.05 (0.05, 0.05) | 31.64 (23.41, 42.76) | 15.59 (11.89, 20.45) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 172 | 0.80 (0.80, 0.80) | 360.49 (287.17, 452.52) | 210.42 (167.63, 264.14) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 172 | 0.15 (0.15, 0.15) | 198.32 (165.67, 237.39) | 220.74 (184.41, 264.24) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 172 | 1.21 (1.21, 1.21) | 15.27 (13.08, 17.82) | 6.62 (5.64, 7.77) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 172 | 7.51 (7.51, 7.51) | 23.12 (20.24, 26.42) | 2.14 (1.89, 2.43) |

(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 (BAU/ml) | 58 | 0.05 (0.05, 0.05) | 73.59 (47.11, 114.95) | 32.19 (20.41, 50.77) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.81 (0.78, 0.84) | 649.55 (424.79, 993.24) | 379.16 (247.96, 579.77) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.16 (0.15, 0.16) | 340.53 (256.98, 451.24) | 379.04 (286.04, 502.27) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 1.77 (1.50, 2.09) | 29.65 (23.17, 37.94) | 11.49 (8.89, 14.84) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 58 | 10.38 (8.90, 12.09) | 51.15 (41.46, 63.11) | 3.78 (2.95, 4.85) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 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 (BAU/ml) | 36 | 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 (BAU/ml) | 36 | 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 cID50 | 36 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 36 | 7.91 (7.47, 8.38) | 7.51 (7.51, 7.51) | 0.98 (0.96, 1.01) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 61 | 0.05 (0.05, 0.05) | 17.42 (10.85, 27.95) | 8.34 (5.35, 12.99) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 61 | 0.80 (0.80, 0.80) | 197.51 (124.06, 314.42) | 115.29 (72.42, 183.54) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 61 | 0.15 (0.15, 0.15) | 111.34 (77.39, 160.17) | 123.93 (86.14, 178.28) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 61 | 1.71 (1.45, 2.02) | 8.97 (6.83, 11.78) | 3.66 (2.83, 4.72) |
| Age < 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 61 | 9.94 (8.67, 11.39) | 17.95 (14.49, 22.24) | 1.47 (1.20, 1.81) |

(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 (BAU/ml) | 172 | 0.05 (0.05, 0.05) | 127.83 (90.56, 180.44) | 59.14 (42.49, 82.31) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 172 | 0.80 (0.80, 0.80) | 3184.52 (2485.29, 4080.48) | 1858.87 (1450.71, 2381.86) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 172 | 0.15 (0.15, 0.15) | 2341.37 (1861.50, 2944.94) | 2606.15 (2072.01, 3277.99) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 172 | 1.21 (1.21, 1.21) | 351.66 (293.40, 421.50) | 157.10 (131.07, 188.30) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 172 | 7.51 (7.51, 7.51) | 492.14 (416.35, 581.73) | 45.83 (38.77, 54.17) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) | 525.87 (287.99, 960.23) | 231.62 (125.87, 426.21) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.81 (0.78, 0.84) | 14021.90 (9132.45, 21529.13) | 8184.86 (5330.79, 12566.98) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.16 (0.15, 0.16) | 8068.33 (5610.64, 11602.60) | 8980.78 (6245.15, 12914.73) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 1.77 (1.50, 2.09) | 1080.90 (762.94, 1531.39) | 418.77 (297.43, 589.61) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 58 | 10.38 (8.90, 12.09) | 1453.39 (1135.47, 1860.32) | 114.29 (88.98, 146.79) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 36 | 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 (BAU/ml) | 36 | 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 (BAU/ml) | 36 | 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 cID50 | 36 | 1.21 (1.21, 1.21) | 1.23 (1.19, 1.26) | 1.00 (1.00, 1.00) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 36 | 7.91 (7.47, 8.38) | 7.51 (7.51, 7.51) | 0.98 (0.96, 1.01) |

(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 (BAU/ml) | 61 | 0.05 (0.05, 0.05) | 81.75 (44.28, 150.91) | 37.48 (20.56, 68.30) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 61 | 0.80 (0.80, 0.80) | 1752.03 (1096.43, 2799.64) | 1022.70 (640.01, 1634.20) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 61 | 0.15 (0.15, 0.15) | 1392.85 (893.03, 2172.39) | 1550.36 (994.03, 2418.07) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 61 | 1.71 (1.45, 2.02) | 242.51 (177.54, 331.27) | 96.85 (71.08, 131.97) |
| Age < 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 61 | 9.94 (8.67, 11.39) | 462.59 (360.18, 594.12) | 37.93 (29.64, 48.53) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 0.05 (0.05, 0.05) | 102.84 (80.14, 131.98) | 45.19 (35.06, 58.25) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 0.80 (0.80, 0.80) | 1369.34 (1115.31, 1681.23) | 799.31 (651.03, 981.37) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 0.15 (0.15, 0.15) | 779.20 (655.36, 926.44) | 867.32 (729.48, 1031.22) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 1.21 (1.21, 1.21) | 27.69 (24.44, 31.37) | 12.34 (10.88, 13.98) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 196 | 7.51 (7.51, 7.51) | 37.65 (33.10, 42.82) | 3.50 (3.09, 3.97) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 55 | 0.05 (0.05, 0.06) | 215.03 (142.79, 323.81) | 95.79 (63.61, 144.24) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 55 | 0.80 (0.80, 0.80) | 2977.08 (2034.61, 4356.13) | 1737.78 (1187.64, 2542.76) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 55 | 0.15 (0.15, 0.15) | 1762.27 (1275.34, 2435.10) | 1961.56 (1419.57, 2710.48) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 55 | 1.52 (1.31, 1.76) | 55.95 (44.23, 70.77) | 22.71 (17.85, 28.88) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 55 | 9.28 (8.27, 10.42) | 71.03 (55.54, 90.85) | 5.98 (4.60, 7.77) |

(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 (BAU/ml) | 35 | 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 (BAU/ml) | 35 | 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 (BAU/ml) | 35 | 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 cID50 | 35 | 1.21 (1.21, 1.21) | 1.25 (1.17, 1.34) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 35 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) | 75.35 (50.45, 112.55) | 32.62 (21.51, 49.46) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.81 (0.78, 0.84) | 917.85 (629.03, 1339.28) | 535.77 (367.17, 781.76) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) | 566.74 (445.20, 721.46) | 630.83 (495.55, 803.05) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.66 (1.45, 1.91) | 19.34 (15.80, 23.67) | 7.86 (6.37, 9.71) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 9.22 (8.01, 10.60) | 23.52 (18.82, 29.40) | 1.98 (1.61, 2.43) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 0.05 (0.05, 0.05) | 511.75 (381.45, 686.55) | 227.21 (169.14, 305.21) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 0.80 (0.80, 0.80) | 15978.46 (12608.12, 20249.74) | 9326.95 (7359.62, 11820.18) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 0.15 (0.15, 0.15) | 13176.09 (10726.24, 16185.49) | 14666.18 (11939.27, 18015.91) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 1.21 (1.21, 1.21) | 852.81 (723.19, 1005.66) | 380.97 (323.07, 449.26) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 196 | 7.51 (7.51, 7.51) | 787.68 (679.83, 912.64) | 73.35 (63.30, 84.98) |

(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 (BAU/ml) | 55 | 0.05 (0.05, 0.06) | 2647.77 (1480.53, 4735.25) | 1179.49 (659.52, 2109.38) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 55 | 0.80 (0.80, 0.80) | 68728.43 (41689.06, 113305.43) | 40118.16 (24334.74, 66138.65) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 55 | 0.15 (0.15, 0.15) | 39234.47 (25954.09, 59310.24) | 43671.49 (28889.24, 66017.64) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 55 | 1.52 (1.31, 1.76) | 2860.83 (2021.86, 4047.93) | 1161.04 (811.14, 1661.88) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 55 | 9.28 (8.27, 10.42) | 2207.30 (1624.62, 2998.97) | 190.11 (142.83, 253.04) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 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 (BAU/ml) | 35 | 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 (BAU/ml) | 35 | 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 cID50 | 35 | 1.21 (1.21, 1.21) | 1.27 (1.16, 1.38) | 1.03 (0.98, 1.08) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 35 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) | 299.14 (189.84, 471.35) | 133.25 (84.57, 209.97) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.81 (0.78, 0.84) | 14365.55 (10202.75, 20226.80) | 8385.46 (5955.55, 11806.79) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) | 9328.48 (6731.41, 12927.52) | 10383.43 (7492.67, 14389.49) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.66 (1.45, 1.91) | 579.22 (440.09, 762.33) | 237.09 (180.63, 311.19) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 9.22 (8.01, 10.60) | 628.10 (499.76, 789.42) | 51.55 (41.19, 64.51) |

(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 (BAU/ml) | 194 | 0.05 (0.05, 0.05) | 107.45 (84.75, 136.23) | 47.46 (37.32, 60.35) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 0.80 (0.80, 0.80) | 1416.27 (1143.81, 1753.62) | 826.70 (667.66, 1023.62) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 0.15 (0.15, 0.15) | 819.89 (684.18, 982.51) | 912.61 (761.55, 1093.63) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 1.21 (1.21, 1.21) | 29.02 (25.46, 33.07) | 12.94 (11.34, 14.76) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 194 | 7.51 (7.51, 7.51) | 37.98 (33.51, 43.06) | 3.44 (3.03, 3.91) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 65 | 0.05 (0.05, 0.05) | 204.03 (131.17, 317.36) | 90.89 (58.43, 141.37) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 65 | 0.80 (0.80, 0.80) | 2730.22 (1984.51, 3756.13) | 1593.68 (1158.40, 2192.53) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 65 | 0.15 (0.15, 0.15) | 1278.50 (1021.04, 1600.88) | 1423.08 (1136.51, 1781.92) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 65 | 1.52 (1.33, 1.74) | 53.97 (43.52, 66.93) | 22.20 (17.83, 27.64) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 65 | 9.20 (8.20, 10.32) | 55.87 (44.81, 69.67) | 4.67 (3.75, 5.83) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 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 (BAU/ml) | 31 | 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 (BAU/ml) | 31 | 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 cID50 | 31 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 31 | 7.64 (7.39, 7.91) | 7.51 (7.51, 7.51) | 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 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.06) | 76.98 (51.40, 115.29) | 34.67 (23.34, 51.51) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 0.82 (0.78, 0.85) | 1048.16 (725.71, 1513.87) | 611.83 (423.61, 883.68) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) | 499.40 (370.25, 673.59) | 555.87 (412.12, 749.77) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 1.66 (1.43, 1.93) | 19.21 (15.49, 23.82) | 7.60 (6.22, 9.27) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 9.17 (8.05, 10.44) | 28.92 (23.76, 35.22) | 2.43 (2.00, 2.97) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 0.05 (0.05, 0.05) | 596.10 (442.78, 802.51) | 265.31 (196.99, 357.34) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 0.80 (0.80, 0.80) | 19887.87 (15555.85, 25426.29) | 11608.95 (9080.26, 14841.84) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 0.15 (0.15, 0.15) | 12500.59 (10172.50, 15361.49) | 13914.28 (11322.91, 17098.72) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 1.21 (1.21, 1.21) | 822.13 (693.64, 974.43) | 367.27 (309.87, 435.31) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 194 | 7.51 (7.51, 7.51) | 841.31 (730.05, 969.52) | 78.34 (67.98, 90.28) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 65 | 0.05 (0.05, 0.05) | 1582.67 (1000.64, 2503.23) | 705.02 (445.75, 1115.10) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 65 | 0.80 (0.80, 0.80) | 48729.63 (34487.01, 68854.24) | 28444.46 (20130.76, 40191.60) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 65 | 0.15 (0.15, 0.15) | 28578.23 (21460.52, 38056.65) | 31810.14 (23887.49, 42360.47) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 65 | 1.52 (1.33, 1.74) | 1980.05 (1553.05, 2524.44) | 814.51 (636.86, 1041.71) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 65 | 9.20 (8.20, 10.32) | 2089.76 (1666.22, 2620.97) | 176.54 (138.73, 224.67) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|---------------------|-------------------------|----|-----------------------|---------------------------------|---------------------------------|
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 31 | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 1.00 (1.00, 1.00) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 31 | 0.80 (0.80, 0.80) | 0.80 (0.80, 0.80) | 1.00 (1.00, 1.00) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 31 | 0.15 (0.15, 0.15) | 0.15 (0.15, 0.15) | 1.00 (1.00, 1.00) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID50 | 31 | 1.21 (1.21, 1.21) | 1.26 (1.19, 1.33) | 1.00 (1.00, 1.00) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 31 | 7.64 (7.39, 7.91) | 7.72 (7.31, 8.16) | 1.02 (0.98, 1.06) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.06) | 457.63 (248.51, 842.70) | 206.47 (113.14, 376.80) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 0.82 (0.78, 0.85) | 14203.36 (9280.26, 21738.13) | 8290.79 (5417.07, 12688.98) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) | 10206.80 (7288.69, 14293.21) | 11361.09 (8112.97, 15909.63) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 1.66 (1.43, 1.93) | 682.51 (521.47, 893.29) | 269.83 (208.05, 349.96) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 9.17 (8.05, 10.44) | 668.62 (520.90, 858.23) | 55.23 (43.73, 69.75) |

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 (BAU/ml) | 320 | 0.05 (0.05, 0.05) | 38.15 (28.53, 51.02) | 18.57 (14.35, 24.04) |
| Male | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 320 | 0.80 (0.80, 0.80) | 457.64 (371.12, 564.33) | 267.13 (216.63, 329.41) |
| Male | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 320 | 0.15 (0.15, 0.15) | 252.49 (212.53, 299.95) | 281.04 (236.57, 333.87) |
| Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 320 | 1.21 (1.21, 1.21) | 17.10 (14.87, 19.67) | 7.44 (6.43, 8.60) |
| Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 320 | 7.51 (7.51, 7.51) | 25.48 (22.40, 29.00) | 2.38 (2.11, 2.69) |
| Male | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 95 | 0.05 (0.05, 0.05) | 78.94 (50.06, 124.47) | 34.54 (21.67, 55.03) |
| Male | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 95 | 0.80 (0.80, 0.80) | 664.48 (437.18, 1009.94) | 387.87 (255.19, 589.52) |
| Male | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 95 | 0.16 (0.15, 0.16) | 438.29 (330.76, 580.78) | 487.86 (368.17, 646.46) |
| Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 95 | 1.67 (1.45, 1.92) | 29.52 (22.97, 37.93) | 11.95 (9.24, 15.45) |
| Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 95 | 9.61 (8.30, 11.12) | 46.32 (37.37, 57.41) | 3.60 (2.80, 4.63) |
| Male | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 cID50 | 63 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Male | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.78 (7.40, 8.18) | 7.51 (7.51, 7.51) | 0.98 (0.95, 1.02) |

(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 (BAU/ml) | 108 | 0.05 (0.05, 0.05) | 23.92 (14.87, 38.48) | 11.32 (7.25, 17.68) |
| Male | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 108 | 0.80 (0.79, 0.81) | 298.61 (197.76, 450.90) | 174.31 (115.44, 263.20) |
| Male | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 108 | 0.15 (0.15, 0.15) | 173.03 (122.78, 243.83) | 192.59 (136.67, 271.40) |
| Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 108 | 1.44 (1.30, 1.59) | 10.66 (8.22, 13.83) | 4.36 (3.38, 5.61) |
| Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 108 | 10.11 (9.02, 11.34) | 19.86 (16.26, 24.24) | 1.73 (1.47, 2.04) |
| Male | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 320 | 0.05 (0.05, 0.05) | 178.15 (128.55, 246.88) | 83.19 (61.30, 112.90) |
| Male | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 320 | 0.80 (0.80, 0.80) | 4244.31 (3392.29, 5310.33) | 2477.49 (1980.15, 3099.75) |
| Male | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 320 | 0.15 (0.15, 0.15) | 3437.26 (2774.16, 4258.86) | 3825.98 (3087.89, 4740.50) |
| Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 320 | 1.21 (1.21, 1.21) | 441.92 (376.96, 518.07) | 197.42 (168.40, 231.44) |
| Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 320 | 7.51 (7.51, 7.51) | 544.29 (469.26, 631.32) | 50.68 (43.70, 58.79) |
| Male | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 95 | 0.05 (0.05, 0.05) | 556.97 (327.90, 946.06) | 248.11 (146.07, 421.44) |
| Male | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 95 | 0.80 (0.80, 0.80) | 15154.35 (10160.04, 22603.69) | 8845.90 (5930.62, 13194.23) |
| Male | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 95 | 0.16 (0.15, 0.16) | 10123.18 (7262.75, 14110.20) | 11268.01 (8084.09, 15705.92) |
| Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 95 | 1.67 (1.45, 1.92) | 1249.39 (877.99, 1777.91) | 505.74 (352.14, 726.33) |
| Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 95 | 9.61 (8.30, 11.12) | 1549.68 (1188.99, 2019.79) | 123.22 (94.61, 160.48) |

(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 (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 cID50 | 63 | 1.21 (1.21, 1.21) | 1.23 (1.19, 1.27) | 1.00 (1.00, 1.00) |
| Male | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.78 (7.40, 8.18) | 7.51 (7.51, 7.51) | 0.98 (0.95, 1.02) |
| Male | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 108 | 0.05 (0.05, 0.05) | 107.97 (60.07, 194.08) | 49.72 (28.19, 87.69) |
| Male | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 108 | 0.80 (0.79, 0.81) | 2584.72 (1697.12, 3936.53) | 1508.75 (990.64, 2297.83) |
| Male | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 108 | 0.15 (0.15, 0.15) | 2423.64 (1588.60, 3697.60) | 2697.72 (1768.25, 4115.76) |
| Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 108 | 1.44 (1.30, 1.59) | 270.04 (197.13, 369.92) | 114.27 (83.95, 155.53) |
| Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 108 | 10.11 (9.02, 11.34) | 428.33 (338.81, 541.51) | 35.67 (28.46, 44.70) |
| Female | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 427 | 0.05 (0.05, 0.05) | 40.32 (32.34, 50.27) | 18.82 (15.33, 23.10) |
| Female | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 427 | 0.80 (0.80, 0.80) | 490.45 (407.20, 590.72) | 286.28 (237.69, 344.82) |
| Female | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 427 | 0.15 (0.15, 0.15) | 278.21 (240.00, 322.50) | 309.67 (267.14, 358.97) |
| Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 427 | 1.21 (1.21, 1.21) | 17.59 (15.59, 19.83) | 7.75 (6.85, 8.76) |
| Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 427 | 7.51 (7.51, 7.51) | 26.38 (23.82, 29.22) | 2.45 (2.23, 2.70) |

(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 (BAU/ml) | 139 | 0.05 (0.05, 0.05) | 83.72 (58.61, 119.58) | 37.61 (26.34, 53.70) |
| Female | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 139 | 0.83 (0.79, 0.87) | 995.38 (720.00, 1376.06) | 573.27 (414.89, 792.12) |
| Female | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 139 | 0.16 (0.15, 0.16) | 500.15 (395.47, 632.53) | 556.71 (440.19, 704.06) |
| Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 139 | 1.67 (1.46, 1.91) | 35.09 (29.05, 42.38) | 13.87 (11.37, 16.92) |
| Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 139 | 10.07 (8.92, 11.36) | 54.95 (46.08, 65.54) | 4.36 (3.62, 5.26) |
| Female | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 75 | 1.22 (1.20, 1.23) | 1.22 (1.20, 1.24) | 1.00 (1.00, 1.00) |
| Female | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 75 | 7.67 (7.41, 7.94) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Female | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 133 | 0.05 (0.05, 0.05) | 30.29 (21.02, 43.65) | 13.91 (9.82, 19.72) |
| Female | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 133 | 0.80 (0.79, 0.81) | 308.16 (209.13, 454.08) | 179.88 (122.07, 265.06) |
| Female | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 133 | 0.15 (0.15, 0.16) | 167.01 (124.57, 223.90) | 185.89 (138.66, 249.22) |
| Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 133 | 1.82 (1.57, 2.10) | 11.99 (9.61, 14.96) | 4.82 (3.91, 5.95) |
| Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 133 | 9.69 (8.59, 10.92) | 20.53 (17.22, 24.47) | 1.63 (1.36, 1.96) |

(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 (BAU/ml) | 427 | 0.05 (0.05, 0.05) | 163.03 (125.40, 211.94) | 72.99 (56.34, 94.57) |
| Female | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 427 | 0.80 (0.80, 0.80) | 5197.76 (4204.66, 6425.43) | 3034.04 (2454.34, 3750.65) |
| Female | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 427 | 0.15 (0.15, 0.15) | 3345.99 (2766.97, 4046.17) | 3724.39 (3079.89, 4503.75) |
| Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 427 | 1.21 (1.21, 1.21) | 417.64 (359.94, 484.59) | 186.57 (160.79, 216.48) |
| Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 427 | 7.51 (7.51, 7.51) | 581.88 (509.61, 664.40) | 54.18 (47.45, 61.87) |
| Female | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 139 | 0.05 (0.05, 0.05) | 722.64 (442.21, 1180.89) | 317.40 (192.51, 523.32) |
| Female | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 139 | 0.83 (0.79, 0.87) | 17863.54 (12513.50, 25500.93) | 10288.21 (7210.72, 14679.15) |
| Female | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 139 | 0.16 (0.15, 0.16) | 11199.68 (8160.35, 15371.03) | 12466.26 (9083.20, 17109.34) |
| Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 139 | 1.67 (1.46, 1.91) | 1261.83 (970.99, 1639.79) | 499.89 (388.50, 643.23) |
| Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 139 | 10.07 (8.92, 11.36) | 1569.32 (1298.20, 1897.06) | 127.90 (105.83, 154.58) |
| Female | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 75 | 1.22 (1.20, 1.23) | 1.26 (1.20, 1.32) | 1.01 (0.99, 1.02) |
| Female | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 75 | 7.67 (7.41, 7.94) | 7.56 (7.46, 7.65) | 1.00 (1.00, 1.01) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------|-----------------------|---------|---------------------|-------------------------|-----|-----------------------|-------------------------------|-------------------------------|
| Female | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 133 | 0.05 (0.05, 0.05) | 157.75 (98.56, 252.50) | 69.76 (43.48, 111.93) |
| Female | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 133 | 0.80 (0.79, 0.81) | 3489.69 (2373.53, 5130.73) | 2037.00 (1385.48, 2994.91) |
| Female | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 133 | 0.15 (0.15, 0.16) | 2223.24 (1551.15, 3186.52) | 2474.66 (1726.57, 3546.89) |
| Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 133 | 1.82 (1.57, 2.10) | 344.99 (271.92, 437.69) | 134.39 (104.89, 172.17) |
| Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 133 | 9.69 (8.59, 10.92) | 480.09 (387.71, 594.47) | 38.38 (31.10, 47.37) |

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 (BAU/ml) | 201 | 0.05 (0.05, 0.05) | 30.87 (23.53, 40.49) | 14.65 (11.40, 18.83) |
| Age < 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 201 | 0.80 (0.80, 0.80) | 370.15 (294.84, 464.71) | 216.07 (172.10, 271.26) |
| Age < 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 201 | 0.15 (0.15, 0.15) | 207.80 (174.00, 248.17) | 231.30 (193.67, 276.23) |
| Age < 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 201 | 1.21 (1.21, 1.21) | 15.29 (13.18, 17.74) | 6.72 (5.77, 7.82) |
| Age < 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 201 | 7.51 (7.51, 7.51) | 23.80 (21.00, 26.98) | 2.22 (1.98, 2.50) |
| Age < 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 66 | 0.05 (0.05, 0.05) | 68.33 (44.04, 106.00) | 30.76 (19.84, 47.71) |
| Age < 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 66 | 0.83 (0.78, 0.89) | 779.97 (523.98, 1161.03) | 447.63 (300.92, 665.86) |
| Age < 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 66 | 0.16 (0.15, 0.16) | 372.63 (282.08, 492.26) | 414.78 (313.98, 547.92) |
| Age < 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 66 | 1.74 (1.47, 2.05) | 31.92 (25.29, 40.27) | 12.40 (9.71, 15.83) |
| Age < 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 66 | 10.17 (8.75, 11.82) | 52.30 (42.19, 64.83) | 4.09 (3.26, 5.14) |
| Age < 65 Female | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 38 | 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 (BAU/ml) | 38 | 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 (BAU/ml) | 38 | 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 cID50 | 38 | 1.22 (1.20, 1.24) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age < 65 Female | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 38 | 7.69 (7.34, 8.05) | 7.51 (7.51, 7.51) | 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 (BAU/ml) | 70 | 0.05 (0.05, 0.05) | 24.29 (15.68, 37.64) | 11.23 (7.40, 17.04) |
| Age < 65 Female | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 70 | 0.80 (0.80, 0.80) | 235.96 (148.54, 374.83) | 137.74 (86.71, 218.80) |
| Age < 65 Female | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 70 | 0.16 (0.15, 0.16) | 125.69 (88.81, 177.88) | 139.90 (98.86, 198.00) |
| Age < 65 Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 70 | 1.83 (1.53, 2.19) | 10.61 (8.12, 13.85) | 4.30 (3.34, 5.54) |
| Age < 65 Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 70 | 9.83 (8.50, 11.37) | 19.31 (15.62, 23.87) | 1.51 (1.21, 1.88) |
| Age < 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 201 | 0.05 (0.05, 0.05) | 114.73 (83.20, 158.20) | 51.50 (37.52, 70.69) |
| Age < 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 201 | 0.80 (0.80, 0.80) | 3714.56 (2870.02, 4807.62) | 2168.27 (1675.29, 2806.30) |
| Age < 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 201 | 0.15 (0.15, 0.15) | 2331.29 (1851.47, 2935.44) | 2594.93 (2060.86, 3267.41) |
| Age < 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 201 | 1.21 (1.21, 1.21) | 344.75 (287.42, 413.53) | 154.01 (128.40, 184.74) |
| Age < 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 201 | 7.51 (7.51, 7.51) | 522.37 (443.42, 615.38) | 48.64 (41.29, 57.30) |
| Age < 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 66 | 0.05 (0.05, 0.05) | 573.17 (312.85, 1050.10) | 250.82 (135.35, 464.80) |
| Age < 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 66 | 0.83 (0.78, 0.89) | 13231.73 (8582.30, 20399.99) | 7593.73 (4928.89, 11699.33) |
| Age < 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 66 | 0.16 (0.15, 0.16) | 8410.23 (5726.22, 12352.28) | 9361.34 (6373.80, 13749.19) |
| Age < 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 66 | 1.74 (1.47, 2.05) | 1072.88 (778.33, 1478.90) | 417.83 (307.20, 568.30) |
| Age < 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 66 | 10.17 (8.75, 11.82) | 1433.60 (1138.13, 1805.77) | 115.86 (92.07, 145.79) |

(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 (BAU/ml) | 38 | 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 (BAU/ml) | 38 | 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 (BAU/ml) | 38 | 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 cID50 | 38 | 1.22 (1.20, 1.24) | 1.25 (1.18, 1.32) | 1.00 (1.00, 1.00) |
| Age < 65 Female | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 38 | 7.69 (7.34, 8.05) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age < 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 70 | 0.05 (0.05, 0.05) | 125.93 (71.58, 221.53) | 55.32 (31.33, 97.68) |
| Age < 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 70 | 0.80 (0.80, 0.80) | 2496.01 (1579.81, 3943.57) | 1456.97 (922.16, 2301.94) |
| Age < 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 70 | 0.16 (0.15, 0.16) | 1564.76 (1020.53, 2399.22) | 1741.72 (1135.94, 2670.55) |
| Age < 65 Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 70 | 1.83 (1.53, 2.19) | 294.59 (221.56, 391.68) | 115.00 (85.45, 154.77) |
| Age < 65 Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 70 | 9.83 (8.50, 11.37) | 441.33 (340.60, 571.85) | 34.92 (27.06, 45.08) |
| Age < 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 156 | 0.05 (0.05, 0.05) | 29.43 (20.59, 42.07) | 14.69 (10.72, 20.14) |
| Age < 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 156 | 0.80 (0.80, 0.80) | 339.74 (264.28, 436.75) | 198.31 (154.26, 254.94) |
| Age < 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 156 | 0.15 (0.15, 0.15) | 187.30 (152.65, 229.82) | 208.48 (169.91, 255.81) |
| Age < 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 156 | 1.21 (1.21, 1.21) | 15.17 (12.78, 18.00) | 6.55 (5.48, 7.83) |
| Age < 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 156 | 7.51 (7.51, 7.51) | 23.11 (19.75, 27.04) | 2.16 (1.86, 2.50) |

(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 (BAU/ml) | 48 | 0.05 (0.05, 0.05) | 59.00 (34.31, 101.47) | 25.70 (14.75, 44.79) |
| Age < 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 48 | 0.80 (0.80, 0.80) | 444.98 (273.94, 722.80) | 259.74 (159.91, 421.91) |
| Age < 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 48 | 0.16 (0.15, 0.16) | 328.29 (237.15, 454.44) | 365.41 (263.97, 505.84) |
| Age < 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 48 | 1.68 (1.42, 1.98) | 24.56 (18.23, 33.09) | 10.04 (7.40, 13.63) |
| Age < 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 48 | 9.87 (8.25, 11.81) | 43.94 (33.90, 56.95) | 3.35 (2.47, 4.55) |
| Age < 65 Male | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 34 | 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 (BAU/ml) | 34 | 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 (BAU/ml) | 34 | 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 cID50 | 34 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age < 65 Male | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 34 | 7.86 (7.37, 8.38) | 7.51 (7.51, 7.51) | 0.98 (0.94, 1.02) |
| Age < 65 Male | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 50 | 0.05 (0.05, 0.05) | 17.18 (9.56, 30.90) | 8.32 (4.81, 14.40) |
| Age < 65 Male | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 50 | 0.80 (0.80, 0.80) | 209.48 (126.34, 347.35) | 122.28 (73.75, 202.76) |
| Age < 65 Male | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 50 | 0.15 (0.15, 0.15) | 126.72 (83.31, 192.75) | 141.05 (92.73, 214.55) |
| Age < 65 Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 50 | 1.41 (1.24, 1.60) | 9.11 (6.59, 12.58) | 3.71 (2.71, 5.08) |
| Age < 65 Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 50 | 10.36 (9.00, 11.93) | 18.42 (14.40, 23.56) | 1.63 (1.34, 1.98) |

(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 (BAU/ml) | 156 | 0.05 (0.05, 0.05) | 135.59 (90.77, 202.55) | 64.10 (44.08, 93.22) |
| Age < 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 156 | 0.80 (0.80, 0.80) | 2906.70 (2231.61, 3786.02) | 1696.70 (1302.64, 2209.97) |
| Age < 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 156 | 0.15 (0.15, 0.15) | 2410.90 (1867.20, 3112.93) | 2683.55 (2078.36, 3464.97) |
| Age < 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 156 | 1.21 (1.21, 1.21) | 374.41 (308.74, 454.06) | 167.26 (137.92, 202.84) |
| Age < 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 156 | 7.51 (7.51, 7.51) | 500.34 (417.13, 600.16) | 46.59 (38.84, 55.88) |
| Age < 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 48 | 0.05 (0.05, 0.05) | 384.85 (204.57, 724.01) | 171.44 (91.13, 322.52) |
| Age < 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 48 | 0.80 (0.80, 0.80) | 10837.65 (6781.54, 17319.77) | 6326.16 (3958.52, 10109.90) |
| Age < 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 48 | 0.16 (0.15, 0.16) | 7573.48 (5159.23, 11117.48) | 8429.97 (5742.69, 12374.76) |
| Age < 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 48 | 1.68 (1.42, 1.98) | 1066.04 (695.25, 1634.57) | 435.89 (281.25, 675.56) |
| Age < 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 48 | 9.87 (8.25, 11.81) | 1447.90 (1051.53, 1993.70) | 112.64 (81.88, 154.96) |
| Age < 65 Male | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 34 | 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 (BAU/ml) | 34 | 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 (BAU/ml) | 34 | 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 cID50 | 34 | 1.21 (1.21, 1.21) | 1.23 (1.19, 1.28) | 1.00 (1.00, 1.00) |
| Age < 65 Male | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 34 | 7.86 (7.37, 8.38) | 7.51 (7.51, 7.51) | 0.98 (0.94, 1.02) |

(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 (BAU/ml) | 50 | 0.05 (0.05, 0.05) | 77.78 (37.60, 160.89) | 36.24 (17.96, 73.13) |
| Age < 65 Male | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 50 | 0.80 (0.80, 0.80) | 1581.64 (956.49, 2615.38) | 923.24 (558.33, 1526.65) |
| Age < 65 Male | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 50 | 0.15 (0.15, 0.15) | 1619.50 (968.96, 2706.81) | 1802.65 (1078.54, 3012.92) |
| Age < 65 Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 50 | 1.41 (1.24, 1.60) | 215.77 (146.34, 318.14) | 91.48 (62.51, 133.87) |
| Age < 65 Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 50 | 10.36 (9.00, 11.93) | 386.48 (288.77, 517.25) | 32.41 (24.46, 42.94) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 226 | 0.05 (0.05, 0.05) | 107.86 (86.26, 134.86) | 47.33 (37.68, 59.46) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 226 | 0.80 (0.80, 0.80) | 1383.06 (1142.45, 1674.34) | 807.32 (666.87, 977.35) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 226 | 0.15 (0.15, 0.15) | 815.18 (686.33, 968.24) | 907.37 (763.94, 1077.73) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 226 | 1.21 (1.21, 1.21) | 29.44 (26.22, 33.07) | 13.12 (11.67, 14.75) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 226 | 7.51 (7.51, 7.51) | 38.55 (34.44, 43.16) | 3.51 (3.13, 3.93) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 73 | 0.05 (0.05, 0.05) | 181.28 (130.29, 252.23) | 80.76 (58.04, 112.36) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 73 | 0.80 (0.80, 0.80) | 2515.69 (1904.03, 3323.83) | 1468.46 (1111.42, 1940.19) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 73 | 0.15 (0.15, 0.15) | 1531.27 (1200.95, 1952.46) | 1704.45 (1336.76, 2173.27) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 73 | 1.43 (1.29, 1.59) | 50.31 (42.13, 60.07) | 21.27 (17.74, 25.49) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 73 | 9.69 (8.66, 10.85) | 66.32 (53.42, 82.34) | 5.56 (4.47, 6.93) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-----------------|-----------------------|---------|---------------------|-------------------------|-----|-----------------------|----------------------------------|----------------------------------|
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 37 | 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 (BAU/ml) | 37 | 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 (BAU/ml) | 37 | 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 cID50 | 37 | 1.21 (1.21, 1.21) | 1.25 (1.17, 1.33) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 37 | 7.62 (7.41, 7.84) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.06) | 75.63 (51.24, 111.63) | 33.79 (22.97, 49.71) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 0.81 (0.78, 0.85) | 931.81 (633.65, 1370.27) | 543.92 (369.88, 799.85) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) | 542.43 (412.65, 713.03) | 603.78 (459.32, 793.66) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 1.77 (1.51, 2.07) | 19.91 (16.26, 24.38) | 7.77 (6.43, 9.38) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 9.10 (7.97, 10.39) | 26.44 (21.70, 32.20) | 2.25 (1.86, 2.71) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 226 | 0.05 (0.05, 0.05) | 594.88 (449.10, 787.98) | 263.88 (198.91, 350.08) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 226 | 0.80 (0.80, 0.80) | 17921.58 (14230.07, 22570.72) | 10461.18 (8306.38, 13174.98) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 226 | 0.15 (0.15, 0.15) | 12667.33 (10427.44, 15388.36) | 14099.87 (11606.68, 17128.63) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 226 | 1.21 (1.21, 1.21) | 846.57 (721.74, 993.00) | 378.19 (322.42, 443.60) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 226 | 7.51 (7.51, 7.51) | 865.89 (756.54, 991.05) | 80.63 (70.45, 92.28) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-----------------|-----------------------|---------|---------------------|-------------------------|----|-----------------------|----------------------------------|----------------------------------|
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 73 | 0.05 (0.05, 0.05) | 1744.00 (1096.73, 2773.29) | 776.89 (488.55, 1235.40) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 73 | 0.80 (0.80, 0.80) | 55919.99 (38298.44, 81649.43) | 32641.62 (22355.56, 47660.41) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 73 | 0.15 (0.15, 0.15) | 33279.22 (24477.15, 45246.55) | 37042.77 (27245.27, 50363.48) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 73 | 1.43 (1.29, 1.59) | 2338.08 (1790.89, 3052.46) | 988.54 (760.96, 1284.17) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 73 | 9.69 (8.66, 10.85) | 2213.46 (1752.04, 2796.39) | 186.29 (146.80, 236.39) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 37 | 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 (BAU/ml) | 37 | 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 (BAU/ml) | 37 | 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 cID50 | 37 | 1.21 (1.21, 1.21) | 1.30 (1.19, 1.43) | 1.02 (0.98, 1.07) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 37 | 7.62 (7.41, 7.84) | 7.69 (7.35, 8.05) | 1.02 (0.98, 1.05) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.06) | 401.40 (233.83, 689.05) | 182.46 (107.82, 308.78) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 0.81 (0.78, 0.85) | 13997.56 (9354.70, 20944.71) | 8170.65 (5460.53, 12225.85) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) | 9533.48 (6959.53, 13059.39) | 10611.62 (7746.59, 14536.27) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 1.77 (1.51, 2.07) | 663.91 (508.79, 866.33) | 256.32 (196.36, 334.60) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 9.10 (7.97, 10.39) | 680.56 (538.86, 859.51) | 56.75 (45.23, 71.19) |

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| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------------|-------------------------------|
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 164 | 0.05 (0.05, 0.05) | 101.43 (77.47, 132.81) | 44.92 (34.24, 58.94) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 164 | 0.80 (0.80, 0.80) | 1405.41 (1112.39, 1775.62) | 820.37 (649.32, 1036.46) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 164 | 0.15 (0.15, 0.15) | 777.59 (649.48, 930.96) | 865.52 (722.93, 1036.25) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 164 | 1.21 (1.21, 1.21) | 26.89 (23.31, 31.02) | 11.99 (10.40, 13.84) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 164 | 7.51 (7.51, 7.51) | 36.83 (31.81, 42.63) | 3.43 (2.97, 3.96) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 47 | 0.05 (0.04, 0.05) | 259.42 (147.00, 457.81) | 115.56 (65.48, 203.94) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 47 | 0.80 (0.80, 0.80) | 3422.86 (2178.46, 5378.10) | 1997.99 (1271.61, 3139.30) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 47 | 0.15 (0.15, 0.15) | 1428.51 (1027.92, 1985.21) | 1590.06 (1144.17, 2209.72) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 47 | 1.66 (1.37, 2.00) | 62.61 (46.81, 83.75) | 24.32 (18.00, 32.85) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 47 | 8.60 (7.70, 9.62) | 57.47 (44.46, 74.29) | 4.82 (3.67, 6.33) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 29 | 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 (BAU/ml) | 29 | 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 (BAU/ml) | 29 | 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 cID50 | 29 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 29 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) | 76.80 (50.51, 116.79) | 33.52 (21.82, 51.51) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.81 (0.78, 0.84) | 1041.94 (729.11, 1488.98) | 608.20 (425.60, 869.15) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) | 518.70 (393.95, 682.95) | 577.36 (438.50, 760.19) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.55 (1.37, 1.76) | 18.59 (14.96, 23.11) | 7.68 (6.13, 9.62) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 9.29 (8.10, 10.65) | 25.87 (20.55, 32.57) | 2.15 (1.72, 2.70) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 164 | 0.05 (0.05, 0.05) | 498.06 (364.76, 680.08) | 222.05 (162.67, 303.12) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 164 | 0.80 (0.80, 0.80) | 17661.59 (13716.78, 22740.88) | 10309.42 (8006.76, 13274.31) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 164 | 0.15 (0.15, 0.15) | 13072.56 (10513.04, 16255.22) | 14550.94 (11701.96, 18093.53) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 164 | 1.21 (1.21, 1.21) | 825.07 (691.94, 983.81) | 368.58 (309.11, 439.50) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 164 | 7.51 (7.51, 7.51) | 747.39 (639.52, 873.46) | 69.59 (59.55, 81.33) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 47 | 0.05 (0.04, 0.05) | 2524.36 (1375.71, 4632.06) | 1124.51 (612.83, 2063.42) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 47 | 0.80 (0.80, 0.80) | 59673.02 (36223.25, 98303.40) | 34832.34 (21144.24, 57381.67) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 47 | 0.15 (0.15, 0.15) | 33151.92 (21828.30, 50349.78) | 36901.07 (24296.86, 56043.83) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 47 | 1.66 (1.37, 2.00) | 2390.44 (1693.45, 3374.29) | 928.56 (640.04, 1347.14) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 47 | 8.60 (7.70, 9.62) | 2045.76 (1495.80, 2797.92) | 177.86 (132.15, 239.37) |

(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 | Negative | Anti N IgG (BAU/ml) | 29 | 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 (BAU/ml) | 29 | 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 (BAU/ml) | 29 | 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 cID50 | 29 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 29 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) | 343.06 (197.27, 596.59) | 151.55 (86.70, 264.91) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.81 (0.78, 0.84) | 14599.56 (10069.02, 21168.62) | 8522.06 (5877.49, 12356.55) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) | 10038.45 (7048.36, 14297.03) | 11173.70 (7845.45, 15913.88) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.55 (1.37, 1.76) | 595.51 (450.41, 787.35) | 250.30 (191.82, 326.61) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 9.29 (8.10, 10.65) | 615.46 (481.20, 787.17) | 49.98 (39.70, 62.93) |



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 (BAU/ml) | 99 | 0.05 (0.05, 0.05) | 46.32 (28.82, 74.43) | 21.68 (14.11, 33.32) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 99 | 0.80 (0.80, 0.80) | 502.10 (352.24, 715.72) | 293.09 (205.61, 417.78) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 99 | 0.15 (0.15, 0.15) | 338.02 (242.86, 470.47) | 376.25 (270.32, 523.68) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 99 | 1.21 (1.21, 1.21) | 18.49 (14.43, 23.71) | 8.19 (6.43, 10.44) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 99 | 7.51 (7.51, 7.51) | 30.05 (24.15, 37.41) | 2.81 (2.30, 3.45) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 31 | 0.05 (0.05, 0.05) | 43.00 (20.21, 91.49) | 20.58 (10.19, 41.58) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 31 | 0.80 (0.80, 0.80) | 1004.65 (484.57, 2082.93) | 586.43 (282.85, 1215.85) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 31 | 0.15 (0.15, 0.15) | 442.54 (245.55, 797.58) | 492.59 (273.32, 887.78) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 31 | 1.30 (1.20, 1.41) | 22.57 (15.32, 33.26) | 9.67 (6.49, 14.41) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 31 | 8.94 (7.17, 11.14) | 38.37 (24.64, 59.75) | 3.33 (2.22, 4.99) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 20 | 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 (BAU/ml) | 20 | 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 (BAU/ml) | 20 | 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 cID50 | 20 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 20 | 8.68 (6.92, 10.87) | 7.51 (7.51, 7.51) | 0.92 (0.78, 1.08) |

(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 (BAU/ml) | 34 | 0.05 (0.05, 0.05) | 25.54 (13.70, 47.59) | 11.88 (6.68, 21.13) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 34 | 0.81 (0.79, 0.83) | 338.50 (176.86, 647.86) | 197.59 (103.24, 378.17) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 34 | 0.15 (0.15, 0.15) | 173.67 (111.05, 271.61) | 193.31 (123.61, 302.33) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 34 | 1.56 (1.22, 2.01) | 10.06 (6.98, 14.48) | 4.08 (2.84, 5.86) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 34 | 11.37 (8.64, 14.96) | 21.37 (15.55, 29.37) | 1.49 (1.08, 2.06) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 99 | 0.05 (0.05, 0.05) | 162.78 (90.74, 292.01) | 73.09 (41.00, 130.32) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 99 | 0.80 (0.80, 0.80) | 6188.84 (4091.31, 9361.73) | 3612.55 (2388.18, 5464.63) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 99 | 0.15 (0.15, 0.15) | 4186.98 (2879.54, 6088.08) | 4660.49 (3205.18, 6776.58) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 99 | 1.21 (1.21, 1.21) | 567.55 (425.73, 756.63) | 253.54 (190.18, 338.01) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 99 | 7.51 (7.51, 7.51) | 690.79 (533.04, 895.23) | 64.32 (49.63, 83.36) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 31 | 0.05 (0.05, 0.05) | 483.42 (160.82, 1453.11) | 209.87 (68.53, 642.74) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 31 | 0.80 (0.80, 0.80) | 10296.90 (5080.81, 20867.99) | 6010.51 (2965.77, 12181.07) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 31 | 0.15 (0.15, 0.15) | 7610.09 (3673.58, 15764.86) | 8470.71 (4089.02, 17547.71) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 31 | 1.30 (1.20, 1.41) | 888.60 (580.47, 1360.29) | 386.35 (253.27, 589.37) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 31 | 8.94 (7.17, 11.14) | 1748.56 (1094.71, 2792.95) | 148.63 (93.28, 236.82) |

(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 (BAU/ml) | 20 | 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 (BAU/ml) | 20 | 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 (BAU/ml) | 20 | 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 cID50 | 20 | 1.21 (1.21, 1.21) | 1.35 (1.15, 1.59) | 1.00 (1.00, 1.00) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 20 | 8.68 (6.92, 10.87) | 7.80 (7.24, 8.39) | 0.94 (0.79, 1.11) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 34 | 0.05 (0.05, 0.05) | 128.60 (56.95, 290.39) | 57.14 (25.24, 129.34) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 34 | 0.81 (0.79, 0.83) | 3323.85 (1770.49, 6240.10) | 1940.20 (1033.47, 3642.47) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 34 | 0.15 (0.15, 0.15) | 2202.73 (1326.45, 3657.89) | 2451.83 (1476.46, 4071.56) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 34 | 1.56 (1.22, 2.01) | 349.80 (194.63, 628.69) | 139.73 (76.47, 255.33) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 34 | 11.37 (8.64, 14.96) | 487.73 (302.81, 785.59) | 34.44 (22.08, 53.72) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 623 | 0.05 (0.05, 0.05) | 38.39 (31.70, 46.50) | 18.31 (15.38, 21.79) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 623 | 0.80 (0.80, 0.80) | 466.22 (401.27, 541.69) | 272.14 (234.23, 316.20) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 623 | 0.15 (0.15, 0.15) | 258.55 (229.78, 290.93) | 287.79 (255.76, 323.83) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 623 | 1.21 (1.21, 1.21) | 17.21 (15.60, 18.99) | 7.53 (6.81, 8.34) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 623 | 7.51 (7.51, 7.51) | 25.58 (23.47, 27.88) | 2.37 (2.19, 2.58) |

(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 (BAU/ml) | 194 | 0.05 (0.05, 0.05) | 85.41 (63.37, 115.13) | 37.68 (27.82, 51.04) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 194 | 0.82 (0.79, 0.84) | 805.15 (610.19, 1062.40) | 465.85 (353.24, 614.36) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 194 | 0.16 (0.15, 0.16) | 462.89 (383.82, 558.25) | 515.24 (427.22, 621.38) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 194 | 1.70 (1.53, 1.90) | 33.52 (28.49, 39.45) | 13.34 (11.25, 15.81) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 194 | 9.92 (8.97, 10.97) | 51.70 (44.84, 59.62) | 4.02 (3.43, 4.73) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 113 | 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 (BAU/ml) | 113 | 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 (BAU/ml) | 113 | 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 cID50 | 113 | 1.21 (1.21, 1.22) | 1.22 (1.20, 1.23) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 113 | 7.56 (7.46, 7.67) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 201 | 0.05 (0.05, 0.05) | 27.97 (20.22, 38.70) | 13.01 (9.57, 17.69) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 201 | 0.80 (0.79, 0.80) | 303.85 (222.61, 414.76) | 177.37 (129.94, 242.10) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 201 | 0.15 (0.15, 0.16) | 171.82 (134.06, 220.21) | 191.25 (149.22, 245.12) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 201 | 1.66 (1.49, 1.85) | 11.72 (9.73, 14.12) | 4.76 (3.99, 5.69) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 201 | 9.51 (8.74, 10.34) | 20.30 (17.53, 23.50) | 1.74 (1.53, 1.99) |

(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 (BAU/ml) | 623 | 0.05 (0.05, 0.05) | 169.83 (136.22, 211.74) | 77.58 (62.75, 95.92) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 623 | 0.80 (0.80, 0.80) | 4600.05 (3897.55, 5429.17) | 2685.14 (2275.08, 3169.12) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 623 | 0.15 (0.15, 0.15) | 3277.33 (2816.17, 3814.02) | 3647.97 (3134.65, 4245.34) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 623 | 1.21 (1.21, 1.21) | 412.28 (366.72, 463.51) | 184.18 (163.82, 207.06) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 623 | 7.51 (7.51, 7.51) | 551.24 (495.10, 613.75) | 51.33 (46.10, 57.15) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 194 | 0.05 (0.05, 0.05) | 637.57 (432.60, 939.64) | 282.09 (190.57, 417.54) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 194 | 0.82 (0.79, 0.84) | 16777.78 (12636.54, 22276.19) | 9707.49 (7314.62, 12883.16) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 194 | 0.16 (0.15, 0.16) | 10681.93 (8474.58, 13464.24) | 11889.95 (9432.96, 14986.91) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 194 | 1.70 (1.53, 1.90) | 1278.57 (1013.95, 1612.25) | 508.69 (404.10, 640.34) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 194 | 9.92 (8.97, 10.97) | 1545.15 (1306.41, 1827.53) | 123.91 (104.80, 146.50) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 113 | 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 (BAU/ml) | 113 | 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 (BAU/ml) | 113 | 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 cID50 | 113 | 1.21 (1.21, 1.22) | 1.24 (1.20, 1.27) | 1.00 (1.00, 1.01) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 113 | 7.56 (7.46, 7.67) | 7.51 (7.51, 7.51) | 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 (BAU/ml) | 201 | 0.05 (0.05, 0.05) | 140.31 (93.26, 211.10) | 62.68 (41.78, 94.02) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 201 | 0.80 (0.79, 0.80) | 2986.56 (2181.24, 4089.20) | 1743.31 (1273.23, 2386.95) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 201 | 0.15 (0.15, 0.16) | 2446.19 (1807.34, 3310.86) | 2722.83 (2011.73, 3685.29) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 201 | 1.66 (1.49, 1.85) | 304.11 (247.38, 373.85) | 122.78 (99.99, 150.77) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 201 | 9.51 (8.74, 10.34) | 451.25 (381.67, 533.51) | 37.88 (32.08, 44.74) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 25 | 0.05 (0.05, 0.05) | 55.82 (28.97, 107.55) | 24.60 (12.67, 47.77) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 25 | 0.80 (0.80, 0.80) | 884.05 (622.13, 1256.23) | 516.04 (363.15, 733.29) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 25 | 0.15 (0.15, 0.15) | 363.19 (173.61, 759.79) | 404.26 (193.24, 845.71) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 25 | 1.21 (1.21, 1.21) | 19.70 (13.53, 28.69) | 8.56 (5.76, 12.73) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 25 | 7.51 (7.51, 7.51) | 27.32 (16.34, 45.68) | 2.79 (1.80, 4.31) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 9 | 0.05 (0.04, 0.05) | 161.82 (17.77, 1473.20) | 72.09 (7.92, 656.26) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 9 | 0.80 (0.80, 0.80) | 2628.59 (831.44, 8310.29) | 1534.36 (485.33, 4850.88) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 9 | 0.15 (0.15, 0.15) | 1546.38 (962.33, 2484.89) | 1721.26 (1071.16, 2765.91) |

(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 cID50 | 9 | 1.96 (1.01, 3.81) | 48.00 (17.20, 133.97) | 16.73 (8.32, 33.66) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 9 | 12.12 (7.72, 19.04) | 105.37 (26.78, 414.58) | 8.85 (2.23, 35.11) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 5 | 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 (BAU/ml) | 5 | 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 (BAU/ml) | 5 | 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 cID50 | 5 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 5 | 10.55 (6.25, 17.81) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 6 | 0.05 (0.05, 0.05) | 16.17 (2.67, 97.74) | 7.69 (1.38, 42.73) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 6 | 0.80 (0.80, 0.80) | 170.13 (66.82, 433.17) | 99.31 (39.00, 252.85) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 6 | 0.15 (0.15, 0.15) | 96.72 (31.92, 293.01) | 107.65 (35.53, 326.15) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 6 | 1.21 (1.21, 1.21) | 7.98 (3.59, 17.74) | 2.90 (1.08, 7.80) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 6 | 17.05 (8.42, 34.53) | 13.28 (7.98, 22.11) | 0.80 (0.35, 1.83) |

(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 (BAU/ml) | 25 | 0.05 (0.05, 0.05) | 174.92 (72.92, 419.62) | 77.92 (32.48, 186.93) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 25 | 0.80 (0.80, 0.80) | 6861.47 (3804.55, 12374.59) | 4005.17 (2220.79, 7223.29) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 25 | 0.15 (0.15, 0.15) | 5091.79 (2619.11, 9898.91) | 5667.62 (2915.31, 11018.38) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 25 | 1.21 (1.21, 1.21) | 586.32 (417.72, 822.95) | 261.92 (186.61, 367.63) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 25 | 7.51 (7.51, 7.51) | 694.34 (509.90, 945.49) | 64.65 (47.48, 88.04) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 9 | 0.05 (0.04, 0.05) | 4104.21 (792.29, 21260.50) | 1828.28 (352.94, 9470.79) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 9 | 0.80 (0.80, 0.80) | 86647.47 (19862.74, 377983.34) | 50577.87 (11594.28, 220636.45) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 9 | 0.15 (0.15, 0.15) | 50715.42 (3247.12, 792103.36) | 56450.83 (3614.34, 881682.28) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 9 | 1.96 (1.01, 3.81) | 2378.74 (1267.08, 4465.69) | 829.28 (340.00, 2022.66) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 9 | 12.12 (7.72, 19.04) | 1529.62 (981.77, 2383.18) | 128.43 (86.67, 190.30) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 5 | 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 (BAU/ml) | 5 | 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 (BAU/ml) | 5 | 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 cID50 | 5 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 5 | 10.55 (6.25, 17.81) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 6 | 0.05 (0.05, 0.05) | 27.10 (2.29, 321.28) | 17.27 (2.54, 117.53) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 6 | 0.80 (0.80, 0.80) | 4119.35 (942.68, 18000.89) | 2404.55 (550.26, 10507.48) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 6 | 0.15 (0.15, 0.15) | 416.74 (91.60, 1895.90) | 463.87 (101.96, 2110.31) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 6 | 1.21 (1.21, 1.21) | 286.72 (91.74, 896.14) | 128.09 (40.98, 400.33) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 6 | 17.05 (8.42, 34.53) | 467.99 (138.35, 1583.06) | 28.38 (13.45, 59.86) |

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 (BAU/ml) | 370 | 0.05 (0.05, 0.05) | 34.08 (26.39, 44.01) | 16.51 (13.12, 20.78) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 0.80 (0.80, 0.80) | 400.44 (330.41, 485.31) | 233.74 (192.87, 283.28) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 0.15 (0.15, 0.15) | 237.37 (204.22, 275.89) | 264.21 (227.32, 307.10) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 1.21 (1.21, 1.21) | 15.55 (13.64, 17.71) | 6.78 (5.93, 7.76) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 370 | 7.51 (7.51, 7.51) | 24.07 (21.54, 26.91) | 2.28 (2.06, 2.52) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 0.05 (0.05, 0.05) | 82.41 (56.70, 119.78) | 36.46 (24.94, 53.29) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 0.83 (0.79, 0.87) | 752.05 (520.11, 1087.41) | 433.13 (299.78, 625.80) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 0.15 (0.15, 0.15) | 513.05 (403.64, 652.12) | 571.07 (449.29, 725.87) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 1.71 (1.48, 1.97) | 33.13 (26.98, 40.67) | 13.09 (10.44, 16.42) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 118 | 10.90 (9.44, 12.59) | 52.80 (43.78, 63.69) | 3.82 (3.08, 4.73) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 cID50 | 63 | 1.21 (1.21, 1.21) | 1.22 (1.20, 1.24) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 0.05 (0.05, 0.05) | 26.72 (17.39, 41.07) | 12.48 (8.31, 18.74) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 0.80 (0.80, 0.80) | 267.93 (174.53, 411.31) | 156.39 (101.87, 240.09) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 0.15 (0.15, 0.15) | 182.62 (133.68, 249.48) | 203.28 (148.80, 277.69) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 1.60 (1.40, 1.82) | 11.37 (8.85, 14.60) | 4.73 (3.74, 6.00) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 9.27 (8.31, 10.33) | 20.09 (16.51, 24.45) | 1.75 (1.46, 2.10) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 0.05 (0.05, 0.05) | 136.02 (102.81, 179.97) | 62.90 (48.23, 82.03) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 0.80 (0.80, 0.80) | 3965.19 (3190.18, 4928.49) | 2314.56 (1862.17, 2876.86) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 0.15 (0.15, 0.15) | 2905.77 (2384.91, 3540.40) | 3234.39 (2654.61, 3940.78) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 1.21 (1.21, 1.21) | 355.22 (305.63, 412.85) | 158.69 (136.53, 184.43) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 370 | 7.51 (7.51, 7.51) | 506.55 (440.71, 582.22) | 47.17 (41.04, 54.21) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 0.05 (0.05, 0.05) | 735.04 (440.86, 1225.53) | 324.06 (192.93, 544.32) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 0.83 (0.79, 0.87) | 17684.90 (12263.74, 25502.49) | 10185.30 (7066.32, 14680.98) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 0.15 (0.15, 0.15) | 10349.34 (7588.49, 14114.66) | 11519.75 (8446.67, 15710.89) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 1.71 (1.48, 1.97) | 1312.29 (957.88, 1797.84) | 518.66 (379.11, 709.59) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 118 | 10.90 (9.44, 12.59) | 1677.99 (1373.02, 2050.70) | 127.67 (104.73, 155.63) |

(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 (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 cID50 | 63 | 1.21 (1.21, 1.21) | 1.22 (1.20, 1.25) | 1.01 (0.99, 1.02) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 0.05 (0.05, 0.05) | 138.49 (81.68, 234.80) | 62.30 (37.01, 104.88) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 0.80 (0.80, 0.80) | 2844.53 (1856.90, 4357.44) | 1660.41 (1083.91, 2543.52) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 0.15 (0.15, 0.15) | 2385.84 (1614.03, 3526.73) | 2655.66 (1796.56, 3925.56) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 1.60 (1.40, 1.82) | 307.89 (235.98, 401.71) | 126.64 (96.91, 165.49) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 9.27 (8.31, 10.33) | 448.64 (360.71, 558.00) | 37.96 (30.40, 47.39) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 184 | 0.05 (0.05, 0.05) | 48.36 (35.37, 66.13) | 22.57 (16.93, 30.08) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 184 | 0.80 (0.80, 0.80) | 618.89 (477.97, 801.36) | 361.26 (279.00, 467.77) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 184 | 0.15 (0.15, 0.15) | 277.76 (220.22, 350.33) | 309.17 (245.12, 389.95) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 184 | 1.21 (1.21, 1.21) | 20.43 (17.33, 24.10) | 9.07 (7.68, 10.71) |

(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 cID80 | 184 | 7.51 (7.51, 7.51) | 29.05 (24.98, 33.77) | 2.61 (2.23, 3.05) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) | 91.09 (50.53, 164.20) | 40.11 (22.05, 72.95) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.80 (0.80, 0.80) | 1224.75 (802.19, 1869.89) | 714.91 (468.25, 1091.49) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.16 (0.15, 0.17) | 483.24 (358.12, 652.08) | 537.89 (398.62, 725.83) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 58 | 1.68 (1.40, 2.01) | 33.46 (25.52, 43.87) | 13.61 (10.52, 17.60) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 58 | 8.49 (7.63, 9.45) | 49.22 (38.99, 62.14) | 4.29 (3.34, 5.51) |
| Black or African American | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 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 (BAU/ml) | 40 | 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 (BAU/ml) | 40 | 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 cID50 | 40 | 1.23 (1.19, 1.26) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Black or African American | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 40 | 8.16 (7.28, 9.15) | 7.51 (7.51, 7.51) | 0.96 (0.90, 1.04) |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 45 | 0.05 (0.04, 0.06) | 44.00 (20.44, 94.70) | 19.87 (9.45, 41.77) |

(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 (BAU/ml) | 45 | 0.80 (0.80, 0.80) | 495.71 (275.52, 891.88) | 289.36 (160.83, 520.61) |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 45 | 0.16 (0.15, 0.17) | 158.14 (87.58, 285.56) | 176.02 (97.48, 317.85) |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 45 | 1.89 (1.45, 2.47) | 15.82 (10.87, 23.04) | 5.79 (3.96, 8.45) |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 45 | 10.14 (8.39, 12.26) | 20.73 (15.40, 27.92) | 1.75 (1.33, 2.30) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 184 | 0.05 (0.05, 0.05) | 204.32 (141.34, 295.38) | 91.19 (63.30, 131.38) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 184 | 0.80 (0.80, 0.80) | 6550.93 (4947.81, 8673.48) | 3823.91 (2888.14, 5062.88) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 184 | 0.15 (0.15, 0.15) | 4332.80 (3331.81, 5634.52) | 4822.80 (3708.61, 6271.73) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 184 | 1.21 (1.21, 1.21) | 466.63 (385.59, 564.71) | 208.46 (172.25, 252.27) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 184 | 7.51 (7.51, 7.51) | 602.26 (505.22, 717.93) | 56.08 (47.04, 66.85) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) | 510.41 (276.01, 943.86) | 227.37 (122.95, 420.46) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.80 (0.80, 0.80) | 16791.27 (11442.61, 24640.08) | 9801.40 (6679.28, 14382.91) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.16 (0.15, 0.17) | 11834.30 (8032.47, 17435.57) | 13172.64 (8940.86, 19407.36) |

(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 cID50 | 58 | 1.68 (1.40, 2.01) | 1190.86 (863.21, 1642.88) | 484.39 (346.14, 677.84) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 58 | 8.49 (7.63, 9.45) | 1295.98 (930.59, 1804.83) | 114.69 (81.64, 161.10) |
| Black or African American | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 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 (BAU/ml) | 40 | 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 (BAU/ml) | 40 | 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 cID50 | 40 | 1.23 (1.19, 1.26) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Black or African American | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 40 | 8.16 (7.28, 9.15) | 7.51 (7.51, 7.51) | 0.96 (0.90, 1.04) |
| Black or African American | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 45 | 0.05 (0.04, 0.06) | 139.02 (56.11, 344.45) | 65.79 (28.12, 153.89) |
| Black or African American | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 45 | 0.80 (0.80, 0.80) | 3611.11 (2108.60, 6184.23) | 2107.88 (1230.83, 3609.86) |
| Black or African American | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 45 | 0.16 (0.15, 0.17) | 2485.87 (1256.81, 4916.86) | 2767.00 (1398.94, 5472.90) |
| Black or African American | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 45 | 1.89 (1.45, 2.47) | 367.94 (254.22, 532.53) | 141.57 (98.94, 202.58) |
| Black or African American | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 45 | 10.14 (8.39, 12.26) | 379.30 (263.98, 545.00) | 30.33 (21.63, 42.54) |

(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 (BAU/ml) | 56 | 0.05 (0.05, 0.05) | 51.94 (30.47, 88.55) | 23.34 (13.85, 39.31) |
| Asian | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 56 | 0.80 (0.80, 0.80) | 566.83 (333.88, 962.32) | 330.87 (194.89, 561.73) |
| Asian | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 56 | 0.15 (0.15, 0.15) | 346.14 (242.73, 493.61) | 385.29 (270.18, 549.43) |
| Asian | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 56 | 1.21 (1.21, 1.21) | 21.15 (16.36, 27.33) | 9.20 (6.92, 12.24) |
| Asian | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 56 | 7.51 (7.51, 7.51) | 27.00 (20.02, 36.41) | 2.54 (1.92, 3.37) |
| Asian | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 19 | 0.05 (0.05, 0.05) | 67.33 (25.71, 176.36) | 29.34 (11.02, 78.12) |
| Asian | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 19 | 0.80 (0.80, 0.80) | 699.97 (328.96, 1489.42) | 408.59 (192.02, 869.40) |
| Asian | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 19 | 0.15 (0.15, 0.15) | 336.86 (211.65, 536.15) | 374.96 (235.58, 596.78) |
| Asian | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 19 | 1.70 (1.26, 2.28) | 30.29 (16.75, 54.77) | 11.88 (7.16, 19.73) |
| Asian | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 19 | 7.79 (7.25, 8.36) | 44.36 (28.60, 68.80) | 4.22 (2.81, 6.34) |
| Asian | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 10 | 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 (BAU/ml) | 10 | 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 (BAU/ml) | 10 | 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 cID50 | 10 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Asian | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 10 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 (BAU/ml) | 27 | 0.05 (0.04, 0.06) | 16.51 (8.01, 34.05) | 8.08 (4.20, 15.53) |
| Asian | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 27 | 0.81 (0.78, 0.84) | 249.55 (119.56, 520.87) | 145.67 (69.79, 304.04) |
| Asian | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 27 | 0.15 (0.15, 0.15) | 133.39 (65.36, 272.24) | 148.48 (72.75, 303.03) |
| Asian | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 27 | 1.74 (1.28, 2.38) | 9.06 (5.87, 13.97) | 3.75 (2.49, 5.65) |
| Asian | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 27 | 10.98 (8.68, 13.89) | 22.24 (16.20, 30.52) | 1.77 (1.35, 2.32) |
| Asian | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 56 | 0.05 (0.05, 0.05) | 411.66 (201.84, 839.58) | 183.38 (89.91, 374.00) |
| Asian | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 56 | 0.80 (0.80, 0.80) | 6371.68 (3790.87, 10709.49) | 3719.27 (2212.81, 6251.34) |
| Asian | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 56 | 0.15 (0.15, 0.15) | 4086.36 (2466.61, 6769.76) | 4548.49 (2745.56, 7535.35) |
| Asian | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 56 | 1.21 (1.21, 1.21) | 663.53 (502.33, 876.46) | 296.42 (224.40, 391.54) |
| Asian | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 56 | 7.51 (7.51, 7.51) | 607.99 (457.15, 808.59) | 56.61 (42.57, 75.29) |
| Asian | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 19 | 0.05 (0.05, 0.05) | 590.76 (180.19, 1936.83) | 263.16 (80.27, 862.79) |
| Asian | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 19 | 0.80 (0.80, 0.80) | 13898.62 (4771.63, 40483.40) | 8112.90 (2785.29, 23630.97) |
| Asian | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 19 | 0.15 (0.15, 0.15) | 8349.05 (4992.03, 13963.57) | 9293.24 (5556.58, 15542.71) |
| Asian | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 19 | 1.70 (1.26, 2.28) | 1495.86 (986.88, 2267.36) | 586.81 (417.13, 825.51) |
| Asian | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 19 | 7.79 (7.25, 8.36) | 1308.98 (747.39, 2292.57) | 118.45 (67.61, 207.51) |

(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 (BAU/ml) | 10 | 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 (BAU/ml) | 10 | 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 (BAU/ml) | 10 | 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 cID50 | 10 | 1.21 (1.21, 1.21) | 1.38 (1.08, 1.76) | 1.00 (1.00, 1.00) |
| Asian | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 10 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Asian | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 27 | 0.05 (0.04, 0.06) | 101.48 (29.62, 347.66) | 44.12 (12.77, 152.46) |
| Asian | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 27 | 0.81 (0.78, 0.84) | 2953.93 (1396.61, 6247.76) | 1724.27 (815.23, 3646.94) |
| Asian | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 27 | 0.15 (0.15, 0.15) | 1905.73 (805.16, 4510.69) | 2121.25 (896.22, 5020.80) |
| Asian | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 27 | 1.74 (1.28, 2.38) | 179.78 (107.24, 301.40) | 71.38 (44.45, 114.63) |
| Asian | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 27 | 10.98 (8.68, 13.89) | 516.66 (344.79, 774.19) | 42.75 (29.76, 61.40) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 0.05 (0.05, 0.05) | 25.22 (11.33, 56.17) | 11.24 (5.05, 25.02) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 0.80 (0.80, 0.80) | 455.88 (234.59, 885.93) | 266.11 (136.94, 517.13) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 0.15 (0.15, 0.15) | 207.27 (109.14, 393.62) | 230.71 (121.48, 438.14) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 1.21 (1.21, 1.21) | 18.96 (13.23, 27.17) | 8.47 (5.91, 12.14) |

(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 cID80 | 16 | 7.51 (7.51, 7.51) | 20.17 (13.85, 29.35) | 1.57 (1.10, 2.22) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 0.05 (0.05, 0.05) | 232.47 (53.43, 1011.46) | 103.56 (23.80, 450.57) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 0.80 (0.80, 0.80) | 1312.99 (224.38, 7683.24) | 766.42 (130.97, 4484.86) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 0.15 (0.15, 0.15) | 416.16 (65.22, 2655.65) | 463.22 (72.59, 2955.98) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 1.75 (1.07, 2.85) | 57.28 (24.69, 132.87) | 21.80 (10.64, 44.69) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 10 | 9.50 (6.80, 13.26) | 107.89 (46.22, 251.85) | 9.86 (4.22, 23.05) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 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 (BAU/ml) | 2 | 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 (BAU/ml) | 2 | 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 cID50 | 2 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 7 | 0.05 (0.04, 0.07) | 33.82 (14.88, 76.90) | 15.07 (6.63, 34.26) |

(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 (BAU/ml) | 7 | 0.80 (0.80, 0.80) | 262.68 (163.15, 422.93) | 153.33 (95.23, 246.87) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 7 | 0.15 (0.15, 0.15) | 135.50 (83.53, 219.82) | 150.82 (92.97, 244.68) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 7 | 1.39 (1.05, 1.83) | 13.57 (9.48, 19.44) | 5.39 (3.52, 8.25) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 7 | 13.04 (6.28, 27.07) | 19.42 (14.26, 26.44) | 0.90 (0.41, 1.99) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 0.05 (0.05, 0.05) | 66.41 (21.00, 210.06) | 29.58 (9.35, 93.57) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 0.80 (0.80, 0.80) | 3570.73 (1847.87, 6899.89) | 2084.30 (1078.64, 4027.60) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 0.15 (0.15, 0.15) | 2054.65 (1024.62, 4120.16) | 2287.01 (1140.49, 4586.11) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 1.21 (1.21, 1.21) | 306.21 (168.96, 554.95) | 136.79 (75.48, 247.91) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 16 | 7.51 (7.51, 7.51) | 494.65 (261.44, 935.89) | 46.06 (24.34, 87.15) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 0.05 (0.05, 0.05) | 1458.89 (207.87, 10238.70) | 649.88 (92.60, 4560.97) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 0.80 (0.80, 0.80) | 23740.75 (5249.95, 107357.95) | 13857.95 (3064.50, 62666.99) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 0.15 (0.15, 0.15) | 37087.45 (6047.70, 227438.46) | 41281.67 (6731.63, 253159.47) |

(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 cID50 | 10 | 1.75 (1.07, 2.85) | 1086.35 (243.01, 4856.54) | 413.53 (94.70, 1805.67) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 10 | 9.50 (6.80, 13.26) | 2009.48 (634.11, 6367.97) | 181.45 (57.57, 571.88) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 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 (BAU/ml) | 2 | 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 (BAU/ml) | 2 | 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 cID50 | 2 | 1.21 (1.21, 1.21) | 1.44 (1.00, 2.09) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 7 | 0.05 (0.04, 0.07) | 174.33 (66.36, 457.98) | 77.66 (29.56, 204.01) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 7 | 0.80 (0.80, 0.80) | 4351.57 (1137.99, 16639.96) | 2540.10 (664.27, 9713.08) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 7 | 0.15 (0.15, 0.15) | 1731.09 (1091.13, 2746.41) | 1926.86 (1214.52, 3057.00) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 7 | 1.39 (1.05, 1.83) | 360.80 (161.38, 806.62) | 145.33 (64.68, 326.53) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 7 | 13.04 (6.28, 27.07) | 545.79 (275.33, 1081.96) | 35.10 (30.21, 40.78) |

(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 (BAU/ml) | 17 | 0.05 (0.05, 0.05) | 41.57 (10.45, 165.37) | 18.63 (4.70, 73.83) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 17 | 0.80 (0.80, 0.80) | 831.43 (392.72, 1760.20) | 485.32 (229.24, 1027.47) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 17 | 0.15 (0.15, 0.15) | 281.31 (161.65, 489.57) | 313.13 (179.93, 544.93) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 17 | 1.21 (1.21, 1.21) | 14.63 (8.47, 25.25) | 6.30 (3.56, 11.12) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 17 | 7.51 (7.51, 7.51) | 34.71 (21.21, 56.78) | 2.82 (1.56, 5.08) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 4 | 0.05 (0.05, 0.05) | 315.89 (136.25, 732.40) | 140.72 (60.69, 326.26) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 4 | 0.80 (0.80, 0.80) | 2517.21 (1854.59, 3416.57) | 1469.34 (1082.56, 1994.32) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 4 | 0.15 (0.15, 0.15) | 1094.52 (540.97, 2214.51) | 1218.30 (602.15, 2464.95) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 4 | 1.52 (1.03, 2.23) | 68.87 (50.08, 94.70) | 30.77 (22.37, 42.31) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 4 | 10.96 (5.71, 21.05) | 87.89 (73.45, 105.16) | 6.07 (3.93, 9.37) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 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 (BAU/ml) | 2 | 0.80 (0.80, 0.80) | 0.80 (0.80, 0.80) | 1.00 (1.00, 1.00) |

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| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---|-----------------------|---------|---------------------|-------------------------|----|------------------------|-------------------------------|-------------------------------|
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 2 | 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 cID50 | 2 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 2 | 12.53 (6.04, 26.02) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 0.05 (0.05, 0.05) | 249.46 (103.20, 603.03) | 111.13 (45.97, 268.63) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 0.80 (0.80, 0.80) | 2643.54 (1298.34, 5382.52) | 1543.09 (757.86, 3141.88) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) | 96.24 (94.64, 97.87) | 107.12 (105.34, 108.94) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 1.21 (1.21, 1.21) | 33.19 (19.82, 55.58) | 14.83 (8.85, 24.83) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) | 15.55 (10.80, 22.39) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 17 | 0.05 (0.05, 0.05) | 345.70 (100.57, 1188.36) | 154.00 (44.80, 529.37) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 17 | 0.80 (0.80, 0.80) | 5000.82 (2764.75, 9045.36) | 2919.08 (1613.84, 5279.96) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 17 | 0.15 (0.15, 0.15) | 3526.24 (1694.94, 7336.17) | 3925.02 (1886.62, 8165.82) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 17 | 1.21 (1.21, 1.21) | 711.04 (339.62, 1488.66) | 317.64 (151.72, 665.02) |

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| 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 cID80 | 17 | 7.51 (7.51, 7.51) | 1038.11 (632.04, 1705.07) | 96.66 (58.85, 158.77) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 4 | 0.05 (0.05, 0.05) | 795.44 (596.70, 1060.38) | 354.34 (265.81, 472.36) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 4 | 0.80 (0.80, 0.80) | 117506.98 (74615.70, 185053.42) | 68591.18 (43554.68, 108019.39) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 4 | 0.15 (0.15, 0.15) | 102048.52 (60099.71, 173277.04) | 113589.18 (66896.39, 192872.93) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 4 | 1.52 (1.03, 2.23) | 2330.62 (1137.68, 4774.45) | 1041.15 (508.23, 2132.88) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 4 | 10.96 (5.71, 21.05) | 5679.32 (4474.10, 7209.18) | 392.33 (196.56, 783.05) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 2 | 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 (BAU/ml) | 2 | 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 (BAU/ml) | 2 | 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 cID50 | 2 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 2 | 12.53 (6.04, 26.02) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 0.05 (0.05, 0.05) | 112.85 (101.38, 125.62) | 50.27 (45.16, 55.96) |

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| 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 (BAU/ml) | 2 | 0.80 (0.80, 0.80) | 1281.73 (1129.81, 1454.08) | 748.17 (659.49, 848.77) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) | 5853.33 (5254.52, 6520.38) | 6515.28 (5848.75, 7257.77) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 1.21 (1.21, 1.21) | 865.00 (376.47, 1987.51) | 386.42 (168.18, 887.87) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) | 273.59 (192.26, 389.32) | 25.48 (17.90, 36.25) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 57 | 0.05 (0.05, 0.05) | 63.72 (39.06, 103.95) | 29.40 (19.00, 45.49) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 57 | 0.80 (0.80, 0.80) | 680.89 (439.41, 1055.08) | 397.45 (256.49, 615.87) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 57 | 0.15 (0.15, 0.15) | 468.79 (300.62, 731.03) | 521.80 (334.61, 813.71) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 57 | 1.21 (1.21, 1.21) | 24.25 (18.56, 31.68) | 10.55 (7.92, 14.06) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 57 | 7.51 (7.51, 7.51) | 36.61 (28.88, 46.41) | 3.40 (2.73, 4.24) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 10 | 0.05 (0.05, 0.05) | 35.81 (17.22, 74.45) | 15.95 (7.67, 33.16) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 0.80 (0.80, 0.80) | 585.30 (248.65, 1377.72) | 341.65 (145.14, 804.20) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 0.15 (0.15, 0.15) | 307.16 (121.84, 774.38) | 341.90 (135.62, 861.96) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 1.21 (1.21, 1.21) | 20.16 (13.18, 30.82) | 9.00 (5.89, 13.77) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 10 | 10.28 (6.07, 17.40) | 33.38 (15.78, 70.60) | 2.50 (1.37, 4.55) |

(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 (BAU/ml) | 8 | 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 (BAU/ml) | 8 | 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 (BAU/ml) | 8 | 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 cID50 | 8 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Multiracial | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 8 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Multiracial | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 16 | 0.05 (0.05, 0.05) | 29.89 (13.84, 64.54) | 12.21 (5.34, 27.93) |
| Multiracial | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 16 | 0.83 (0.77, 0.89) | 924.61 (523.85, 1631.96) | 539.71 (305.78, 952.61) |
| Multiracial | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 16 | 0.15 (0.15, 0.15) | 352.91 (218.34, 570.41) | 392.82 (243.04, 634.92) |
| Multiracial | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 16 | 1.60 (1.18, 2.16) | 9.72 (5.69, 16.62) | 3.82 (2.10, 6.94) |
| Multiracial | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 16 | 17.15 (10.75, 27.38) | 25.75 (16.52, 40.13) | 1.53 (1.08, 2.18) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 57 | 0.05 (0.05, 0.05) | 255.11 (118.56, 548.94) | 114.44 (53.43, 245.10) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 57 | 0.80 (0.80, 0.80) | 8215.71 (4964.67, 13595.66) | 4795.68 (2897.98, 7936.06) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 57 | 0.15 (0.15, 0.15) | 5617.50 (3951.81, 7985.29) | 6252.78 (4398.72, 8888.35) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 57 | 1.21 (1.21, 1.21) | 707.51 (496.25, 1008.71) | 316.07 (221.69, 450.62) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 57 | 7.51 (7.51, 7.51) | 929.00 (667.01, 1293.91) | 86.50 (62.11, 120.48) |

(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 (BAU/ml) | 10 | 0.05 (0.05, 0.05) | 406.85 (56.32, 2939.29) | 181.24 (25.09, 1309.35) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10 | 0.80 (0.80, 0.80) | 7480.16 (2394.58, 23366.38) | 4366.32 (1397.77, 13639.43) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10 | 0.15 (0.15, 0.15) | 5537.31 (1571.82, 19507.16) | 6163.53 (1749.58, 21713.22) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 10 | 1.21 (1.21, 1.21) | 855.78 (402.27, 1820.57) | 382.30 (179.71, 813.30) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 10 | 10.28 (6.07, 17.40) | 1670.65 (1084.79, 2572.89) | 122.78 (81.40, 185.20) |
| Multiracial | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 8 | 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 (BAU/ml) | 8 | 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 (BAU/ml) | 8 | 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 cID50 | 8 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Multiracial | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 8 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Multiracial | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 16 | 0.05 (0.05, 0.05) | 365.33 (82.27, 1622.24) | 162.73 (36.64, 722.66) |
| Multiracial | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 16 | 0.83 (0.77, 0.89) | 6641.75 (2467.22, 17879.61) | 3876.92 (1440.16, 10436.69) |
| Multiracial | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 16 | 0.15 (0.15, 0.15) | 2918.31 (1507.00, 5651.30) | 3248.34 (1677.43, 6290.41) |
| Multiracial | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 16 | 1.60 (1.18, 2.16) | 471.29 (253.46, 876.30) | 187.19 (100.10, 350.07) |
| Multiracial | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 16 | 17.15 (10.75, 27.38) | 819.72 (368.54, 1823.25) | 46.01 (20.80, 101.80) |

(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 (BAU/ml) | 16 | 0.05 (0.05, 0.05) | 45.59 (14.02, 148.20) | 22.17 (7.48, 65.74) |
| Other | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 0.80 (0.80, 0.80) | 954.67 (452.96, 2012.08) | 557.26 (264.40, 1174.49) |
| Other | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 0.15 (0.15, 0.15) | 362.47 (196.46, 668.78) | 403.46 (218.67, 744.41) |
| Other | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 1.21 (1.21, 1.21) | 22.42 (13.44, 37.40) | 9.46 (5.28, 16.95) |
| Other | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 16 | 7.51 (7.51, 7.51) | 26.66 (14.34, 49.57) | 2.60 (1.53, 4.43) |
| Other | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 7 | 0.05 (0.04, 0.07) | 91.30 (29.66, 281.03) | 40.67 (13.21, 125.19) |
| Other | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 7 | 0.80 (0.80, 0.80) | 1683.69 (1105.78, 2563.63) | 982.80 (645.47, 1496.44) |
| Other | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 7 | 0.15 (0.15, 0.15) | 577.79 (232.90, 1433.42) | 643.13 (259.23, 1595.52) |
| Other | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 7 | 1.47 (1.06, 2.04) | 33.43 (19.66, 56.84) | 13.31 (7.83, 22.61) |
| Other | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 7 | 9.41 (6.79, 13.05) | 56.36 (37.43, 84.87) | 5.25 (3.49, 7.90) |
| Other | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 1 | 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 (BAU/ml) | 1 | 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 (BAU/ml) | 1 | 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 cID50 | 1 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Other | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 1 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 (BAU/ml) | 13 | 0.05 (0.05, 0.05) | 30.54 (11.57, 80.62) | 14.33 (5.79, 35.47) |
| Other | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 13 | 0.80 (0.80, 0.80) | 233.75 (99.57, 548.73) | 136.44 (58.12, 320.31) |
| Other | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 13 | 0.15 (0.15, 0.15) | 153.92 (75.16, 315.23) | 171.33 (83.66, 350.88) |
| Other | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 13 | 1.43 (1.11, 1.85) | 9.72 (5.02, 18.80) | 4.33 (2.28, 8.22) |
| Other | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 13 | 8.37 (6.78, 10.34) | 18.09 (10.25, 31.92) | 1.73 (1.04, 2.89) |
| Other | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 16 | 0.05 (0.05, 0.05) | 179.09 (80.22, 399.84) | 79.78 (35.73, 178.12) |
| Other | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 16 | 0.80 (0.80, 0.80) | 5123.38 (1923.26, 13648.21) | 2990.62 (1122.64, 7966.74) |
| Other | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 16 | 0.15 (0.15, 0.15) | 6094.59 (2760.52, 13455.48) | 6783.83 (3072.70, 14977.16) |
| Other | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 16 | 1.21 (1.21, 1.21) | 838.28 (321.29, 2187.15) | 374.48 (143.53, 977.06) |
| Other | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 16 | 7.51 (7.51, 7.51) | 537.41 (216.29, 1335.28) | 50.04 (20.14, 124.34) |
| Other | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 7 | 0.05 (0.04, 0.07) | 469.54 (166.46, 1324.43) | 209.16 (74.15, 589.99) |
| Other | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 7 | 0.80 (0.80, 0.80) | 9884.65 (2588.20, 37750.60) | 5769.87 (1510.79, 22035.78) |
| Other | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 7 | 0.15 (0.15, 0.15) | 15218.24 (5421.81, 42715.39) | 16939.27 (6034.97, 47546.07) |
| Other | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 7 | 1.47 (1.06, 2.04) | 1132.03 (353.43, 3625.94) | 450.62 (147.88, 1373.17) |
| Other | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 7 | 9.41 (6.79, 13.05) | 1571.30 (512.63, 4816.26) | 146.31 (47.73, 448.47) |

(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 (BAU/ml) | 1 | 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 (BAU/ml) | 1 | 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 (BAU/ml) | 1 | 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 cID50 | 1 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Other | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 1 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Other | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 13 | 0.05 (0.05, 0.05) | 98.02 (28.64, 335.45) | 43.44 (12.61, 149.59) |
| Other | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 13 | 0.80 (0.80, 0.80) | 2580.02 (811.17, 8206.11) | 1506.01 (473.49, 4790.07) |
| Other | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 13 | 0.15 (0.15, 0.15) | 1905.90 (604.75, 6006.49) | 2121.44 (673.15, 6685.77) |
| Other | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 13 | 1.43 (1.11, 1.85) | 406.27 (141.59, 1165.71) | 178.11 (62.27, 509.43) |
| Other | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 13 | 8.37 (6.78, 10.34) | 486.57 (223.05, 1061.44) | 41.51 (18.82, 91.54) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 4 | 0.05 (0.05, 0.05) | 22.70 (0.94, 547.12) | 13.44 (0.77, 233.10) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 4 | 0.80 (0.80, 0.80) | 425.33 (131.39, 1376.88) | 248.27 (76.69, 803.71) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 4 | 0.15 (0.15, 0.15) | 214.96 (30.19, 1530.49) | 239.27 (33.61, 1703.57) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 4 | 1.21 (1.21, 1.21) | 17.17 (3.38, 87.16) | 5.97 (0.88, 40.42) |

(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 cID80 | 4 | 7.51 (7.51, 7.51) | 18.80 (5.55, 63.69) | 2.19 (0.76, 6.30) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 1 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 0.05 (0.05, 0.05) | 11.18 (5.91, 21.17) | 4.98 (2.63, 9.43) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 0.80 (0.80, 0.80) | 355.07 (154.05, 818.42) | 207.26 (89.92, 477.73) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) | 115.90 (46.80, 287.06) | 129.01 (52.09, 319.53) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 3.37 (0.79, 14.35) | 9.94 (5.30, 18.65) | 2.17 (1.48, 3.19) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) | 20.03 (5.01, 80.10) | 2.23 (0.72, 6.93) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 4 | 0.05 (0.05, 0.05) | 239.33 (43.05, 1330.56) | 106.61 (19.18, 592.72) |

(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 (BAU/ml) | 4 | 0.80 (0.80, 0.80) | 1359.83 (35.46, 52152.50) | 793.76 (20.70, 30442.46) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 4 | 0.15 (0.15, 0.15) | 1869.74 (295.22, 11841.84) | 2081.19 (328.61, 13181.04) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 4 | 1.21 (1.21, 1.21) | 214.93 (97.85, 472.11) | 96.02 (43.71, 210.90) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 4 | 7.51 (7.51, 7.51) | 527.73 (211.45, 1317.11) | 49.14 (19.69, 122.64) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/ml) | 1 | 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 cID50 | 1 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 1 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 2 | 0.05 (0.05, 0.05) | 59.40 (5.40, 653.72) | 26.46 (2.40, 291.21) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2 | 0.80 (0.80, 0.80) | 1036.14 (428.68, 2504.42) | 604.82 (250.23, 1461.88) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2 | 0.15 (0.15, 0.15) | 2699.56 (369.10, 19744.27) | 3004.85 (410.84, 21977.15) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------------|-----------------------|---------|---------------------|-----------------------|---|-----------------------|----------------------------|-------------------------|
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 2 | 3.37 (0.79, 14.35) | 111.24 (25.15, 491.99) | 24.26 (15.11, 38.94) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 2 | 7.51 (7.51, 7.51) | 374.13 (373.95, 374.31) | 34.84 (34.82, 34.85) |

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 (BAU/ml) | 377 | 0.05 (0.05, 0.05) | 47.88 (38.41, 59.67) | 22.15 (18.03, 27.23) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 377 | 0.80 (0.80, 0.80) | 601.72 (499.59, 724.73) | 351.24 (291.62, 423.04) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 377 | 0.15 (0.15, 0.15) | 312.83 (267.85, 365.36) | 348.21 (298.15, 406.68) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 377 | 1.21 (1.21, 1.21) | 20.20 (18.04, 22.63) | 8.90 (7.92, 10.00) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 377 | 7.51 (7.51, 7.51) | 28.84 (25.80, 32.24) | 2.63 (2.35, 2.93) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 116 | 0.05 (0.05, 0.05) | 80.72 (53.07, 122.80) | 36.10 (23.72, 54.93) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 116 | 0.80 (0.80, 0.80) | 988.93 (705.93, 1385.38) | 577.26 (412.07, 808.67) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 116 | 0.16 (0.15, 0.16) | 422.75 (324.82, 550.21) | 470.56 (361.56, 612.44) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 116 | 1.62 (1.43, 1.83) | 32.03 (25.63, 40.04) | 12.97 (10.59, 15.89) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 116 | 8.58 (7.93, 9.28) | 49.02 (40.19, 59.78) | 4.35 (3.57, 5.29) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 75 | 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 (BAU/ml) | 75 | 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 (BAU/ml) | 75 | 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 cID50 | 75 | 1.22 (1.20, 1.24) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 75 | 8.05 (7.49, 8.64) | 7.51 (7.51, 7.51) | 0.98 (0.95, 1.02) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------|-----------------------|---------|---------------------|-------------------------|-----|------------------------|----------------------------------|---------------------------------|
| Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 0.05 (0.05, 0.06) | 27.93 (18.97, 41.13) | 12.95 (8.99, 18.66) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 0.80 (0.79, 0.81) | 352.63 (249.40, 498.60) | 205.84 (145.58, 291.04) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 0.16 (0.15, 0.16) | 155.52 (114.15, 211.87) | 173.11 (127.06, 235.83) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 1.69 (1.46, 1.95) | 11.40 (9.17, 14.17) | 4.47 (3.60, 5.54) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 120 | 10.64 (9.36, 12.10) | 20.39 (17.22, 24.13) | 1.59 (1.35, 1.87) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 377 | 0.05 (0.05, 0.05) | 227.46 (171.83, 301.11) | 101.70 (76.97, 134.37) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 377 | 0.80 (0.80, 0.80) | 6116.64 (5002.83, 7478.42) | 3570.40 (2920.25, 4365.30) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 377 | 0.15 (0.15, 0.15) | 4158.17 (3454.12, 5005.74) | 4628.42 (3844.74, 5571.83) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 377 | 1.21 (1.21, 1.21) | 549.84 (479.76, 630.15) | 245.63 (214.32, 281.50) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 377 | 7.51 (7.51, 7.51) | 656.33 (575.68, 748.27) | 61.11 (53.60, 69.68) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 116 | 0.05 (0.05, 0.05) | 543.72 (333.11, 887.50) | 240.93 (147.32, 394.02) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 116 | 0.80 (0.80, 0.80) | 15372.49 (10572.42, 22351.88) | 8973.23 (6171.33, 13047.24) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 116 | 0.16 (0.15, 0.16) | 11322.94 (8105.96, 15816.62) | 12603.45 (9022.66, 17605.32) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 116 | 1.62 (1.43, 1.83) | 1181.83 (923.19, 1512.91) | 479.98 (376.77, 611.47) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 116 | 8.58 (7.93, 9.28) | 1409.31 (1101.23, 1803.57) | 123.54 (96.25, 158.57) |

(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 (BAU/ml) | 75 | 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 (BAU/ml) | 75 | 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 (BAU/ml) | 75 | 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 cID50 | 75 | 1.22 (1.20, 1.24) | 1.28 (1.20, 1.36) | 1.00 (1.00, 1.00) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 75 | 8.05 (7.49, 8.64) | 7.57 (7.45, 7.69) | 0.99 (0.95, 1.03) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 120 | 0.05 (0.05, 0.06) | 127.29 (76.15, 212.77) | 57.37 (34.58, 95.19) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 120 | 0.80 (0.79, 0.81) | 3319.09 (2360.16, 4667.65) | 1937.42 (1377.67, 2724.60) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 120 | 0.16 (0.15, 0.16) | 2224.20 (1531.96, 3229.24) | 2475.74 (1705.21, 3594.44) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 120 | 1.69 (1.46, 1.95) | 311.04 (233.55, 414.23) | 123.14 (92.64, 163.68) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 120 | 10.64 (9.36, 12.10) | 465.54 (369.92, 585.87) | 36.21 (29.35, 44.67) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 370 | 0.05 (0.05, 0.05) | 34.08 (26.39, 44.01) | 16.51 (13.12, 20.78) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 0.80 (0.80, 0.80) | 400.44 (330.41, 485.31) | 233.74 (192.87, 283.28) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 0.15 (0.15, 0.15) | 237.37 (204.22, 275.89) | 264.21 (227.32, 307.10) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 1.21 (1.21, 1.21) | 15.55 (13.64, 17.71) | 6.78 (5.93, 7.76) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 370 | 7.51 (7.51, 7.51) | 24.07 (21.54, 26.91) | 2.28 (2.06, 2.52) |

(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 (BAU/ml) | 118 | 0.05 (0.05, 0.05) | 82.41 (56.70, 119.78) | 36.46 (24.94, 53.29) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 0.83 (0.79, 0.87) | 752.05 (520.11, 1087.41) | 433.13 (299.78, 625.80) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 0.15 (0.15, 0.15) | 513.05 (403.64, 652.12) | 571.07 (449.29, 725.87) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 1.71 (1.48, 1.97) | 33.13 (26.98, 40.67) | 13.09 (10.44, 16.42) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 118 | 10.90 (9.44, 12.59) | 52.80 (43.78, 63.69) | 3.82 (3.08, 4.73) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 cID50 | 63 | 1.21 (1.21, 1.21) | 1.22 (1.20, 1.24) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 121 | 0.05 (0.05, 0.05) | 26.72 (17.39, 41.07) | 12.48 (8.31, 18.74) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 0.80 (0.80, 0.80) | 267.93 (174.53, 411.31) | 156.39 (101.87, 240.09) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 0.15 (0.15, 0.15) | 182.62 (133.68, 249.48) | 203.28 (148.80, 277.69) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 1.60 (1.40, 1.82) | 11.37 (8.85, 14.60) | 4.73 (3.74, 6.00) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 9.27 (8.31, 10.33) | 20.09 (16.51, 24.45) | 1.75 (1.46, 2.10) |

(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 (BAU/ml) | 370 | 0.05 (0.05, 0.05) | 136.02 (102.81, 179.97) | 62.90 (48.23, 82.03) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 370 | 0.80 (0.80, 0.80) | 3965.19 (3190.18, 4928.49) | 2314.56 (1862.17, 2876.86) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 370 | 0.15 (0.15, 0.15) | 2905.77 (2384.91, 3540.40) | 3234.39 (2654.61, 3940.78) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 370 | 1.21 (1.21, 1.21) | 355.22 (305.63, 412.85) | 158.69 (136.53, 184.43) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 370 | 7.51 (7.51, 7.51) | 506.55 (440.71, 582.22) | 47.17 (41.04, 54.21) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 118 | 0.05 (0.05, 0.05) | 735.04 (440.86, 1225.53) | 324.06 (192.93, 544.32) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 118 | 0.83 (0.79, 0.87) | 17684.90 (12263.74, 25502.49) | 10185.30 (7066.32, 14680.98) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 118 | 0.15 (0.15, 0.15) | 10349.34 (7588.49, 14114.66) | 11519.75 (8446.67, 15710.89) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 118 | 1.71 (1.48, 1.97) | 1312.29 (957.88, 1797.84) | 518.66 (379.11, 709.59) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 118 | 10.90 (9.44, 12.59) | 1677.99 (1373.02, 2050.70) | 127.67 (104.73, 155.63) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 (BAU/ml) | 63 | 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 cID50 | 63 | 1.21 (1.21, 1.21) | 1.22 (1.20, 1.25) | 1.01 (0.99, 1.02) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 63 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 (BAU/ml) | 121 | 0.05 (0.05, 0.05) | 138.49 (81.68, 234.80) | 62.30 (37.01, 104.88) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 121 | 0.80 (0.80, 0.80) | 2844.53 (1856.90, 4357.44) | 1660.41 (1083.91, 2543.52) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 121 | 0.15 (0.15, 0.15) | 2385.84 (1614.03, 3526.73) | 2655.66 (1796.56, 3925.56) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 121 | 1.60 (1.40, 1.82) | 307.89 (235.98, 401.71) | 126.64 (96.91, 165.49) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 121 | 9.27 (8.31, 10.33) | 448.64 (360.71, 558.00) | 37.96 (30.40, 47.39) |

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 (BAU/ml) | 181 | 0.05 (0.05, 0.05) | 40.76 (30.95, 53.67) | 19.11 (14.78, 24.69) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 181 | 0.80 (0.80, 0.80) | 479.15 (380.27, 603.74) | 279.69 (221.97, 352.41) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 181 | 0.15 (0.15, 0.15) | 248.38 (204.73, 301.33) | 276.47 (227.88, 335.41) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 181 | 1.21 (1.21, 1.21) | 18.82 (16.35, 21.67) | 8.26 (7.14, 9.55) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 181 | 7.51 (7.51, 7.51) | 27.06 (23.59, 31.03) | 2.44 (2.14, 2.80) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 60 | 0.05 (0.05, 0.05) | 64.06 (38.89, 105.52) | 28.67 (17.40, 47.24) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 60 | 0.80 (0.80, 0.80) | 786.45 (529.58, 1167.93) | 459.07 (309.12, 681.75) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 60 | 0.16 (0.15, 0.17) | 330.33 (243.57, 448.00) | 367.69 (271.12, 498.67) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 60 | 1.62 (1.40, 1.87) | 28.32 (21.73, 36.90) | 11.46 (9.02, 14.55) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 60 | 8.33 (7.62, 9.11) | 47.37 (37.42, 59.96) | 4.29 (3.40, 5.42) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 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 (BAU/ml) | 40 | 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 (BAU/ml) | 40 | 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 cID50 | 40 | 1.22 (1.20, 1.25) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 40 | 8.21 (7.44, 9.06) | 7.51 (7.51, 7.51) | 0.97 (0.92, 1.03) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 62 | 0.05 (0.05, 0.06) | 21.81 (13.71, 34.71) | 10.27 (6.64, 15.89) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 62 | 0.80 (0.80, 0.80) | 266.59 (176.70, 402.20) | 155.61 (103.14, 234.77) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 62 | 0.16 (0.15, 0.16) | 118.20 (81.43, 171.57) | 131.56 (90.63, 190.97) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 62 | 1.68 (1.41, 2.00) | 10.05 (7.73, 13.05) | 3.96 (3.06, 5.13) |
| Age < 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 62 | 10.95 (9.36, 12.81) | 19.73 (16.09, 24.19) | 1.51 (1.24, 1.85) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 181 | 0.05 (0.05, 0.05) | 181.82 (128.01, 258.25) | 81.36 (57.42, 115.27) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 181 | 0.80 (0.80, 0.80) | 4576.25 (3579.40, 5850.72) | 2671.25 (2089.37, 3415.18) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 181 | 0.15 (0.15, 0.15) | 3156.05 (2506.81, 3973.43) | 3512.96 (2790.30, 4422.79) |

(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 cID50 | 181 | 1.21 (1.21, 1.21) | 501.87 (424.02, 594.01) | 224.20 (189.42, 265.36) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 181 | 7.51 (7.51, 7.51) | 622.52 (528.99, 732.60) | 57.97 (49.26, 68.22) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 60 | 0.05 (0.05, 0.05) | 439.21 (244.36, 789.44) | 194.40 (107.90, 350.26) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 60 | 0.80 (0.80, 0.80) | 11515.00 (7382.14, 17961.63) | 6721.54 (4309.10, 10484.56) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 60 | 0.16 (0.15, 0.17) | 8880.91 (6021.62, 13097.90) | 9885.25 (6702.60, 14579.14) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 60 | 1.62 (1.40, 1.87) | 1032.23 (769.96, 1383.86) | 419.28 (315.00, 558.09) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 60 | 8.33 (7.62, 9.11) | 1290.56 (962.67, 1730.13) | 115.09 (85.45, 155.00) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 40 | 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 (BAU/ml) | 40 | 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 (BAU/ml) | 40 | 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 cID50 | 40 | 1.22 (1.20, 1.25) | 1.29 (1.18, 1.40) | 1.00 (1.00, 1.00) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 40 | 8.21 (7.44, 9.06) | 7.51 (7.51, 7.51) | 0.97 (0.92, 1.03) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------------------------------|-----------------------|---------|---------------------|-------------------------|-----|------------------------|-------------------------------|-------------------------------|
| Age < 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 62 | 0.05 (0.05, 0.06) | 99.31 (53.20, 185.39) | 44.89 (24.28, 82.99) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 62 | 0.80 (0.80, 0.80) | 2290.78 (1529.69, 3430.54) | 1337.17 (892.91, 2002.48) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 62 | 0.16 (0.15, 0.16) | 1577.94 (1007.97, 2470.22) | 1756.39 (1121.96, 2749.58) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 62 | 1.68 (1.41, 2.00) | 264.11 (187.12, 372.78) | 104.93 (74.49, 147.82) |
| Age < 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 62 | 10.95 (9.36, 12.81) | 422.79 (318.67, 560.93) | 32.63 (25.21, 42.24) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 176 | 0.05 (0.05, 0.05) | 24.32 (17.76, 33.29) | 12.09 (9.13, 16.01) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 176 | 0.80 (0.80, 0.80) | 287.61 (227.68, 363.32) | 167.88 (132.90, 212.08) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 176 | 0.15 (0.15, 0.15) | 168.88 (140.99, 202.30) | 187.98 (156.94, 225.17) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 176 | 1.21 (1.21, 1.21) | 13.05 (11.12, 15.32) | 5.67 (4.80, 6.68) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 176 | 7.51 (7.51, 7.51) | 21.20 (18.50, 24.30) | 2.03 (1.79, 2.30) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 54 | 0.05 (0.05, 0.05) | 64.43 (40.45, 102.62) | 28.44 (17.72, 45.65) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 54 | 0.83 (0.78, 0.89) | 514.72 (325.06, 815.04) | 295.30 (186.71, 467.05) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-----------------------------|-----------------------|---------|---------------------|-------------------------|----|------------------------|----------------------------|----------------------------|
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 54 | 0.15 (0.15, 0.15) | 371.84 (277.65, 497.98) | 413.89 (309.05, 554.29) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 54 | 1.78 (1.49, 2.13) | 28.84 (22.32, 37.25) | 11.28 (8.49, 14.98) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 54 | 11.55 (9.62, 13.87) | 49.61 (39.32, 62.60) | 3.42 (2.62, 4.46) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 32 | 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 (BAU/ml) | 32 | 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 (BAU/ml) | 32 | 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 cID50 | 32 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 32 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) | 20.11 (11.86, 34.13) | 9.50 (5.77, 15.66) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.80 (0.80, 0.80) | 192.98 (113.92, 326.90) | 112.65 (66.50, 190.82) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) | 133.37 (91.19, 195.06) | 148.45 (101.50, 217.12) |
| Age < 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.59 (1.35, 1.87) | 9.82 (7.20, 13.40) | 4.09 (3.05, 5.49) |

(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 cID80 | 58 | 9.36 (8.19, 10.69) | 18.24 (14.33, 23.23) | 1.60 (1.28, 2.00) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 176 | 0.05 (0.05, 0.05) | 92.65 (65.76, 130.55) | 43.31 (31.32, 59.90) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 176 | 0.80 (0.80, 0.80) | 2660.00 (2042.25, 3464.59) | 1552.69 (1192.10, 2022.35) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 176 | 0.15 (0.15, 0.15) | 1914.52 (1506.58, 2432.91) | 2131.03 (1676.96, 2708.05) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 176 | 1.21 (1.21, 1.21) | 278.35 (231.74, 334.33) | 124.35 (103.53, 149.36) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 176 | 7.51 (7.51, 7.51) | 445.02 (375.02, 528.09) | 41.44 (34.92, 49.17) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 54 | 0.05 (0.05, 0.05) | 523.26 (276.02, 991.96) | 230.00 (120.15, 440.30) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 54 | 0.83 (0.78, 0.89) | 12694.31 (8088.43, 19922.98) | 7282.85 (4643.92, 11421.35) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 54 | 0.15 (0.15, 0.15) | 7479.68 (5101.02, 10967.54) | 8325.56 (5677.89, 12207.86) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 54 | 1.78 (1.49, 2.13) | 1099.25 (740.37, 1632.09) | 429.81 (290.11, 636.77) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 54 | 11.55 (9.62, 13.87) | 1562.37 (1219.05, 2002.37) | 114.07 (89.38, 145.59) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 32 | 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 (BAU/ml) | 32 | 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 (BAU/ml) | 32 | 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 cID50 | 32 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 32 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.05) | 104.39 (54.65, 199.40) | 46.94 (24.79, 88.87) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.80 (0.80, 0.80) | 1855.13 (1102.73, 3120.92) | 1082.88 (643.68, 1821.75) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) | 1597.52 (992.02, 2572.62) | 1778.19 (1104.20, 2863.56) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.59 (1.35, 1.87) | 251.25 (181.38, 348.03) | 103.31 (74.40, 143.44) |
| Age < 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 9.36 (8.19, 10.69) | 411.10 (314.50, 537.38) | 34.84 (26.49, 45.81) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 0.05 (0.05, 0.05) | 85.51 (68.12, 107.32) | 37.76 (29.99, 47.54) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 0.80 (0.80, 0.80) | 1367.10 (1120.52, 1667.95) | 798.00 (654.07, 973.62) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 0.15 (0.15, 0.15) | 718.28 (608.48, 847.90) | 799.51 (677.29, 943.79) |

(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 cID50 | 196 | 1.21 (1.21, 1.21) | 26.06 (22.95, 29.59) | 11.62 (10.24, 13.20) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 196 | 7.51 (7.51, 7.51) | 36.31 (31.75, 41.53) | 3.40 (2.99, 3.87) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 0.05 (0.05, 0.05) | 240.37 (149.08, 387.55) | 107.07 (66.41, 172.64) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 0.80 (0.80, 0.80) | 2915.65 (1928.59, 4407.89) | 1701.92 (1125.75, 2572.97) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 0.15 (0.15, 0.15) | 1354.33 (1009.85, 1816.33) | 1507.49 (1124.05, 2021.74) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 1.60 (1.36, 1.89) | 57.31 (44.38, 73.99) | 23.26 (17.68, 30.59) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 56 | 9.84 (8.49, 11.39) | 57.61 (45.41, 73.08) | 4.64 (3.67, 5.86) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 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 (BAU/ml) | 35 | 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 (BAU/ml) | 35 | 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 cID50 | 35 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 35 | 7.65 (7.38, 7.92) | 7.51 (7.51, 7.51) | 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 (BAU/ml) | 58 | 0.05 (0.05, 0.06) | 74.69 (50.19, 111.13) | 32.55 (21.61, 49.04) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.83 (0.78, 0.88) | 1072.80 (748.14, 1538.36) | 626.22 (436.70, 897.97) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) | 463.24 (352.22, 609.26) | 515.63 (392.06, 678.16) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.71 (1.45, 2.01) | 18.83 (15.12, 23.46) | 7.22 (5.74, 9.08) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 58 | 9.51 (8.23, 10.99) | 23.23 (18.67, 28.90) | 1.91 (1.53, 2.38) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 196 | 0.05 (0.05, 0.05) | 509.74 (377.39, 688.51) | 227.25 (168.29, 306.87) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 196 | 0.80 (0.80, 0.80) | 17397.22 (13573.73, 22297.71) | 10155.10 (7923.26, 13015.62) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 196 | 0.15 (0.15, 0.15) | 11229.81 (9207.59, 13696.17) | 12499.79 (10248.87, 15245.07) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 196 | 1.21 (1.21, 1.21) | 763.94 (641.68, 909.50) | 341.27 (286.66, 406.30) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 196 | 7.51 (7.51, 7.51) | 794.07 (687.17, 917.59) | 73.94 (63.99, 85.44) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 56 | 0.05 (0.05, 0.05) | 1488.93 (859.44, 2579.47) | 663.26 (382.85, 1149.06) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 56 | 0.80 (0.80, 0.80) | 60111.35 (40246.72, 89780.62) | 35088.20 (23492.81, 52406.75) |

(continued)

| Group | Visit | Arm | Baseline SARS-CoV-2 | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------------------------------|-----------------------|---------|---------------------|-------------------------|----|-----------------------|----------------------------------|----------------------------------|
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 56 | 0.15 (0.15, 0.15) | 35635.46 (24143.48, 52597.47) | 39665.47 (26873.87, 58545.72) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 56 | 1.60 (1.36, 1.89) | 2238.45 (1675.95, 2989.74) | 908.56 (665.23, 1240.91) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 56 | 9.84 (8.49, 11.39) | 2135.17 (1598.70, 2851.65) | 172.64 (131.56, 226.54) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/ml) | 35 | 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 (BAU/ml) | 35 | 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 (BAU/ml) | 35 | 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 cID50 | 35 | 1.21 (1.21, 1.21) | 1.26 (1.19, 1.33) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 35 | 7.65 (7.38, 7.92) | 7.73 (7.30, 8.18) | 1.02 (0.98, 1.06) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 58 | 0.05 (0.05, 0.06) | 341.70 (208.05, 561.20) | 152.22 (92.68, 249.99) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 58 | 0.83 (0.78, 0.88) | 14505.10 (9439.81, 22288.36) | 8466.92 (5510.21, 13010.16) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 58 | 0.15 (0.15, 0.15) | 8712.33 (6274.68, 12097.00) | 9697.61 (6984.28, 13465.05) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 58 | 1.71 (1.45, 2.01) | 596.13 (446.31, 796.24) | 232.68 (175.48, 308.52) |

(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 cID80 | 58 | 9.51 (8.23, 10.99) | 682.84 (543.58, 857.77) | 54.78 (43.56, 68.88) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 0.05 (0.05, 0.05) | 123.31 (96.30, 157.89) | 54.22 (42.18, 69.70) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 0.80 (0.80, 0.80) | 1412.35 (1141.70, 1747.16) | 824.42 (666.44, 1019.85) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 0.15 (0.15, 0.15) | 867.91 (724.66, 1039.47) | 966.06 (806.61, 1157.02) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 194 | 1.21 (1.21, 1.21) | 30.24 (26.67, 34.29) | 13.47 (11.87, 15.29) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 194 | 7.51 (7.51, 7.51) | 39.02 (34.58, 44.03) | 3.53 (3.12, 3.99) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 64 | 0.05 (0.05, 0.05) | 193.76 (131.26, 286.01) | 86.31 (58.47, 127.41) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 64 | 0.80 (0.80, 0.80) | 2806.76 (2061.51, 3821.41) | 1638.36 (1203.35, 2230.63) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 64 | 0.15 (0.15, 0.15) | 1569.51 (1213.12, 2030.60) | 1747.01 (1350.31, 2260.24) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 64 | 1.48 (1.30, 1.67) | 53.62 (43.78, 65.66) | 22.00 (17.98, 26.92) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 64 | 8.93 (8.10, 9.84) | 65.59 (52.60, 81.78) | 5.63 (4.47, 7.09) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/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 | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (BAU/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 (BAU/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 cID50 | 31 | 1.21 (1.21, 1.21) | 1.25 (1.17, 1.34) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 31 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (BAU/ml) | 63 | 0.05 (0.05, 0.05) | 77.42 (51.70, 115.94) | 34.59 (23.16, 51.64) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) | 915.81 (627.71, 1336.14) | 534.58 (366.41, 779.93) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) | 592.74 (452.27, 776.85) | 659.78 (503.42, 864.70) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 1.63 (1.43, 1.85) | 19.63 (16.06, 24.00) | 8.16 (6.78, 9.83) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 8.94 (7.89, 10.14) | 28.80 (23.45, 35.37) | 2.47 (2.04, 2.98) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 194 | 0.05 (0.05, 0.05) | 587.10 (439.80, 783.73) | 260.40 (194.76, 348.17) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 194 | 0.80 (0.80, 0.80) | 18139.10 (14345.34, 22936.16) | 10588.16 (8373.66, 13388.30) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 194 | 0.15 (0.15, 0.15) | 14236.08 (11584.07, 17495.23) | 15846.04 (12894.11, 19473.77) |

(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 cID50 | 194 | 1.21 (1.21, 1.21) | 899.16 (765.84, 1055.68) | 401.68 (342.12, 471.60) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 194 | 7.51 (7.51, 7.51) | 829.50 (719.17, 956.76) | 77.24 (66.97, 89.09) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 64 | 0.05 (0.05, 0.05) | 2393.12 (1477.83, 3875.29) | 1066.05 (658.32, 1726.30) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 64 | 0.80 (0.80, 0.80) | 55942.36 (36988.10, 84609.57) | 32654.68 (21590.70, 49388.30) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 64 | 0.15 (0.15, 0.15) | 31971.03 (23196.84, 44064.05) | 35586.63 (25820.16, 49047.25) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 64 | 1.48 (1.30, 1.67) | 2428.01 (1824.93, 3230.40) | 996.21 (747.24, 1328.11) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 64 | 8.93 (8.10, 9.84) | 2150.25 (1684.59, 2744.63) | 188.78 (147.74, 241.20) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (BAU/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 | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (BAU/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 (BAU/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 cID50 | 31 | 1.21 (1.21, 1.21) | 1.26 (1.16, 1.38) | 1.02 (0.98, 1.08) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb cID80 | 31 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 (BAU/ml) | 63 | 0.05 (0.05, 0.05) | 399.18 (225.22, 707.51) | 179.95 (102.35, 316.37) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 63 | 0.80 (0.80, 0.80) | 14104.09 (9867.31, 20160.04) | 8232.84 (5759.75, 11767.82) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 63 | 0.15 (0.15, 0.15) | 10718.36 (7686.05, 14946.97) | 11930.50 (8555.27, 16637.32) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID50 | 63 | 1.63 (1.43, 1.85) | 659.35 (509.51, 853.25) | 271.51 (211.11, 349.19) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb cID80 | 63 | 8.94 (7.89, 10.14) | 622.36 (487.13, 795.13) | 52.34 (41.69, 65.71) |

2.9 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 (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 1.02 (0.97, 1.08) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 0.80 (0.80, 0.80) | 0.82 (0.79, 0.85) | 0.97 (0.94, 1.01) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 0.15 (0.15, 0.15) | 0.16 (0.15, 0.16) | 0.99 (0.97, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 1.52 (1.37, 1.68) | 1.71 (1.52, 1.93) | 0.89 (0.76, 1.04) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 9.24 (8.52, 10.03) | 10.04 (8.96, 11.26) | 0.92 (0.80, 1.06) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.22) | 1.00 (0.99, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.57 (7.45, 7.70) | 7.78 (7.49, 8.08) | 0.97 (0.93, 1.01) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 0.99 (0.92, 1.06) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 0.81 (0.79, 0.84) | 0.80 (0.80, 0.80) | 1.02 (0.99, 1.05) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 0.15 (0.15, 0.15) | 0.15 (0.15, 0.16) | 0.99 (0.98, 1.01) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 1.66 (1.50, 1.84) | 1.63 (1.45, 1.84) | 1.02 (0.87, 1.19) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 9.19 (8.36, 10.11) | 10.06 (9.08, 11.15) | 0.91 (0.79, 1.05) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 105.10 (88.47, 124.86) | 30.25 (24.33, 37.60) | 3.47 (2.63, 4.59) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 1392.43 (1200.78, 1614.67) | 356.86 (301.49, 422.39) | 3.90 (3.12, 4.88) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 799.13 (705.06, 905.76) | 198.79 (173.81, 227.36) | 4.02 (3.35, 4.83) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 28.34 (25.89, 31.02) | 15.24 (13.63, 17.04) | 1.86 (1.61, 2.15) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 37.82 (34.56, 41.37) | 23.51 (21.31, 25.93) | 1.61 (1.41, 1.84) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 209.19 (154.61, 283.03) | 64.27 (45.66, 90.47) | 3.25 (2.06, 5.14) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 2844.99 (2222.07, 3642.53) | 617.21 (450.57, 845.49) | 4.61 (3.09, 6.88) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 1489.36 (1223.39, 1813.16) | 353.46 (285.77, 437.17) | 4.21 (3.15, 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 |
|----------------------|--------|---------|---------------------|-------------------------|----------------------------------|-------------------------------|----------------------|
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 54.90 (46.83, 64.36) | 28.61 (23.76, 34.45) | 1.92 (1.50, 2.45) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 62.63 (53.04, 73.97) | 48.64 (41.15, 57.48) | 1.29 (1.02, 1.63) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.23 (1.19, 1.28) | 1.21 (1.21, 1.21) | 1.02 (0.98, 1.06) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 76.19 (57.27, 101.36) | 20.88 (14.63, 29.80) | 3.65 (2.31, 5.76) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 982.84 (754.71, 1279.93) | 224.00 (159.42, 314.74) | 4.39 (2.85, 6.75) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 530.97 (437.49, 644.42) | 126.14 (96.53, 164.83) | 4.21 (3.03, 5.86) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 19.27 (16.61, 22.35) | 9.92 (8.08, 12.19) | 1.94 (1.51, 2.50) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 26.17 (22.51, 30.42) | 18.92 (16.11, 22.22) | 1.38 (1.11, 1.72) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 552.00 (447.81, 680.43) | 123.20 (95.80, 158.44) | 4.48 (3.23, 6.21) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 17811.61 (15012.46, 21132.68) | 3345.62 (2777.00, 4030.66) | 5.32 (4.13, 6.86) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 12836.45 (11096.62, 14849.05) | 2364.92 (1992.88, 2806.42) | 5.43 (4.34, 6.80) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline SARS-CoV-2 | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|----------------------|--------|---------|---------------------|-------------------------|----------------------------------|---------------------------------|-----------------------|
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 837.45 (743.98, 942.66) | 357.11 (312.83, 407.65) | 2.35 (1.96, 2.80) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 813.85 (734.70, 901.52) | 512.86 (454.13, 579.18) | 1.59 (1.35, 1.86) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 2021.65 (1395.66, 2928.42) | 485.45 (311.29, 757.03) | 4.16 (2.34, 7.43) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 57390.09 (42425.39, 77633.31) | 12175.02 (8842.14, 16764.17) | 4.71 (3.04, 7.32) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 33228.31 (25909.63, 42614.29) | 8050.61 (6114.49, 10599.79) | 4.13 (2.85, 5.98) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 2358.86 (1909.82, 2913.48) | 1070.02 (826.48, 1385.33) | 2.20 (1.58, 3.08) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 2144.88 (1777.29, 2588.48) | 1439.55 (1191.48, 1739.25) | 1.49 (1.14, 1.95) |
| Age ≥ 65 vs Age < 65 | Day 57 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.26 (1.20, 1.33) | 1.24 (1.20, 1.28) | 1.02 (0.96, 1.09) |
| Age ≥ 65 vs Age < 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.61 (7.41, 7.81) | 7.51 (7.51, 7.51) | 1.01 (0.99, 1.04) |
| Age ≥ 65 vs Age < 65 | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 372.41 (252.92, 548.36) | 102.01 (64.98, 160.15) | 3.65 (2.02, 6.61) |
| Age ≥ 65 vs Age < 65 | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 14281.73 (10842.90, 18811.19) | 2044.73 (1455.28, 2872.94) | 6.98 (4.51, 10.82) |
| Age ≥ 65 vs Age < 65 | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 9771.25 (7721.56, 12365.03) | 1588.46 (1142.67, 2208.16) | 6.15 (4.10, 9.22) |

(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 cID50 | 630.33 (519.76, 764.44) | 257.10 (203.12, 325.43) | 2.45 (1.81, 3.32) |
| Age \geq 65 vs Age < 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 648.67 (547.29, 768.82) | 416.45 (343.36, 505.10) | 1.56 (1.20, 2.01) |

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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 (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| At-risk vs Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| At-risk vs Not at-risk | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 1.02 (0.97, 1.06) |
| At-risk vs Not at-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 0.82 (0.77, 0.88) | 0.81 (0.79, 0.83) | 1.02 (0.95, 1.09) |
| At-risk vs Not at-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 0.15 (0.15, 0.15) | 0.16 (0.15, 0.16) | 0.98 (0.96, 1.01) |
| At-risk vs Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 1.57 (1.40, 1.76) | 1.73 (1.50, 1.98) | 0.91 (0.76, 1.09) |
| At-risk vs Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 9.36 (8.35, 10.48) | 10.17 (8.94, 11.58) | 0.92 (0.77, 1.09) |
| At-risk vs Not at-risk | Day 1 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.22 (1.20, 1.24) | 1.21 (1.21, 1.21) | 1.01 (0.99, 1.02) |
| At-risk vs Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.86 (7.50, 8.23) | 0.96 (0.91, 1.00) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline SARS-CoV-2 | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|------------------------|--------|---------|---------------------|-------------------------|-----------------------------|-----------------------------|----------------------|
| At-risk vs Not at-risk | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 0.94 (0.88, 1.01) |
| At-risk vs Not at-risk | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 0.80 (0.79, 0.81) | 0.80 (0.79, 0.81) | 1.00 (0.99, 1.01) |
| At-risk vs Not at-risk | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 0.16 (0.15, 0.16) | 0.15 (0.15, 0.15) | 1.01 (0.99, 1.04) |
| At-risk vs Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 1.53 (1.38, 1.69) | 1.70 (1.48, 1.96) | 0.90 (0.76, 1.07) |
| At-risk vs Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 10.00 (8.97, 11.14) | 9.81 (8.74, 11.01) | 1.02 (0.87, 1.19) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 40.32 (33.02, 49.23) | 38.84 (30.11, 50.10) | 1.04 (0.75, 1.44) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 516.91 (434.48, 614.97) | 453.52 (373.62, 550.49) | 1.14 (0.88, 1.48) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 294.81 (255.35, 340.37) | 251.64 (215.64, 293.64) | 1.17 (0.95, 1.45) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 18.02 (16.26, 19.98) | 17.01 (14.92, 19.38) | 1.06 (0.90, 1.25) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 27.52 (24.95, 30.36) | 25.13 (22.44, 28.14) | 1.10 (0.94, 1.27) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 72.75 (49.40, 107.15) | 87.15 (59.57, 127.48) | 0.83 (0.48, 1.44) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 875.73 (634.67, 1208.35) | 824.18 (574.54, 1182.28) | 1.06 (0.65, 1.73) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 577.86 (452.58, 737.83) | 424.06 (333.14, 539.80) | 1.36 (0.96, 1.93) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 32.53 (26.65, 39.71) | 32.75 (26.56, 40.38) | 0.99 (0.74, 1.33) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 49.96 (40.47, 61.68) | 51.91 (43.40, 62.08) | 0.96 (0.73, 1.27) |

(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 (BAU/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 (BAU/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 (BAU/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 cID50 | 1.22 (1.20, 1.25) | 1.21 (1.21, 1.21) | 1.01 (0.99, 1.04) |
| At-risk vs Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| At-risk vs Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 39.07 (27.06, 56.40) | 22.29 (14.89, 33.35) | 1.75 (1.02, 3.03) |
| At-risk vs Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 399.73 (291.24, 548.63) | 260.53 (175.30, 387.19) | 1.53 (0.92, 2.55) |
| At-risk vs Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 230.58 (178.83, 297.31) | 142.82 (104.63, 194.96) | 1.61 (1.08, 2.42) |
| At-risk vs Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 13.89 (11.24, 17.17) | 10.17 (8.07, 12.83) | 1.37 (1.00, 1.87) |
| At-risk vs Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 21.72 (18.34, 25.72) | 19.43 (16.19, 23.32) | 1.12 (0.87, 1.43) |
| At-risk vs Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 175.84 (138.12, 223.86) | 165.51 (123.58, 221.68) | 1.06 (0.73, 1.55) |
| At-risk vs Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 5606.18 (4585.35, 6854.28) | 4330.32 (3501.86, 5354.77) | 1.29 (0.96, 1.74) |
| At-risk vs Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 3919.84 (3269.77, 4699.17) | 3101.15 (2549.75, 3771.78) | 1.26 (0.97, 1.65) |
| At-risk vs Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 468.02 (411.38, 532.45) | 405.51 (347.62, 473.04) | 1.15 (0.94, 1.41) |
| At-risk vs Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 614.23 (547.72, 688.82) | 538.46 (467.44, 620.28) | 1.14 (0.95, 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 |
|------------------------|--------|---------|---------------------|-------------------------|----------------------------------|----------------------------------|----------------------|
| At-risk vs Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 681.83 (436.93, 1064.01) | 631.28 (379.42, 1050.35) | 1.08 (0.55, 2.13) |
| At-risk vs Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 15742.11 (11096.03, 22333.56) | 17239.12 (11977.96, 24811.18) | 0.91 (0.55, 1.52) |
| At-risk vs Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 12327.67 (9020.42, 16847.51) | 9950.91 (7303.49, 13557.98) | 1.24 (0.80, 1.93) |
| At-risk vs Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 1375.89 (1057.21, 1790.64) | 1195.03 (890.64, 1603.47) | 1.15 (0.78, 1.71) |
| At-risk vs Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 1593.34 (1280.14, 1983.16) | 1543.60 (1251.74, 1903.51) | 1.03 (0.76, 1.40) |
| At-risk vs Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.26 (1.19, 1.35) | 1.23 (1.20, 1.27) | 1.02 (0.96, 1.10) |
| At-risk vs Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.55 (7.47, 7.63) | 0.99 (0.98, 1.01) |
| At-risk vs Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 191.20 (125.62, 291.02) | 108.79 (64.41, 183.76) | 1.76 (0.90, 3.44) |
| At-risk vs Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 4423.09 (3257.84, 6005.14) | 2479.40 (1657.15, 3709.64) | 1.78 (1.07, 2.97) |
| At-risk vs Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 3158.86 (2281.20, 4374.18) | 1938.34 (1324.99, 2835.62) | 1.63 (0.99, 2.70) |
| At-risk vs Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 351.46 (273.50, 451.64) | 287.94 (220.69, 375.68) | 1.22 (0.85, 1.76) |
| At-risk vs Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 399.37 (320.90, 497.03) | 491.75 (397.36, 608.56) | 0.81 (0.60, 1.10) |

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 (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 1.00 (0.95, 1.05) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 0.83 (0.76, 0.91) | 0.81 (0.78, 0.84) | 1.03 (0.94, 1.13) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 0.15 (0.15, 0.15) | 0.16 (0.15, 0.16) | 0.98 (0.95, 1.01) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 1.59 (1.38, 1.84) | 1.77 (1.50, 2.09) | 0.90 (0.72, 1.12) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 9.39 (8.08, 10.90) | 10.38 (8.90, 12.09) | 0.90 (0.73, 1.12) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.22 (1.20, 1.25) | 1.21 (1.21, 1.21) | 1.01 (0.99, 1.04) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.91 (7.47, 8.38) | 0.95 (0.90, 1.00) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 0.95 (0.88, 1.03) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/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 (BAU/ml) | 0.16 (0.15, 0.16) | 0.15 (0.15, 0.15) | 1.02 (0.98, 1.05) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 1.48 (1.30, 1.69) | 1.71 (1.45, 2.02) | 0.87 (0.70, 1.07) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 10.31 (8.97, 11.86) | 9.94 (8.67, 11.39) | 1.04 (0.85, 1.26) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 27.71 (21.41, 35.84) | 31.64 (23.41, 42.76) | 0.88 (0.59, 1.30) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 349.87 (279.45, 438.03) | 360.49 (287.17, 452.52) | 0.97 (0.70, 1.34) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 199.73 (166.21, 240.01) | 198.32 (165.67, 237.39) | 1.01 (0.78, 1.30) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline SARS-CoV-2 | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|---------------------|-------------------------|----------------------------|----------------------------|----------------------|
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 15.18 (13.27, 17.35) | 15.27 (13.08, 17.82) | 0.99 (0.81, 1.22) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 24.27 (21.38, 27.56) | 23.12 (20.24, 26.42) | 1.05 (0.87, 1.26) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 48.62 (29.53, 80.04) | 73.59 (47.11, 114.95) | 0.66 (0.34, 1.29) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 555.52 (371.70, 830.23) | 649.55 (424.79, 993.24) | 0.86 (0.48, 1.53) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 381.68 (284.39, 512.26) | 340.53 (256.98, 451.24) | 1.12 (0.75, 1.68) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 26.59 (20.62, 34.29) | 29.65 (23.17, 37.94) | 0.90 (0.63, 1.28) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 43.84 (33.39, 57.55) | 51.15 (41.46, 63.11) | 0.86 (0.61, 1.21) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 (BAU/ml) | 30.34 (18.77, 49.04) | 17.42 (10.85, 27.95) | 1.74 (0.89, 3.42) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 290.24 (193.43, 435.51) | 197.51 (124.06, 314.42) | 1.47 (0.79, 2.72) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 163.09 (117.48, 226.43) | 111.34 (77.39, 160.17) | 1.46 (0.90, 2.39) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 12.23 (9.23, 16.21) | 8.97 (6.83, 11.78) | 1.36 (0.92, 2.02) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 21.07 (16.95, 26.19) | 17.95 (14.49, 22.24) | 1.17 (0.86, 1.59) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 114.61 (83.79, 156.78) | 127.83 (90.56, 180.44) | 0.90 (0.56, 1.43) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 3684.93 (2839.16, 4782.66) | 3184.52 (2485.29, 4080.48) | 1.16 (0.81, 1.66) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 2411.71 (1908.81, 3047.12) | 2341.37 (1861.50, 2944.94) | 1.03 (0.74, 1.43) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 368.01 (311.75, 434.43) | 351.66 (293.40, 421.50) | 1.05 (0.82, 1.34) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 555.98 (479.07, 645.23) | 492.14 (416.35, 581.73) | 1.13 (0.90, 1.41) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 411.63 (236.09, 717.69) | 525.87 (287.99, 960.23) | 0.78 (0.34, 1.78) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 9098.59 (5981.40, 13840.28) | 14021.90 (9132.45, 21529.13) | 0.65 (0.36, 1.18) |

(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 (BAU/ml) | 8014.18 (5452.45, 11779.48) | 8068.33 (5610.64, 11602.60) | 0.99 (0.58, 1.69) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 1047.93 (752.94, 1458.49) | 1080.90 (762.94, 1531.39) | 0.97 (0.60, 1.57) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 1411.41 (1070.84, 1860.31) | 1453.39 (1135.47, 1860.32) | 0.97 (0.67, 1.41) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.26 (1.16, 1.37) | 1.23 (1.19, 1.26) | 1.03 (0.94, 1.12) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 160.93 (92.55, 279.82) | 81.75 (44.28, 150.91) | 1.97 (0.86, 4.50) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2810.16 (1910.33, 4133.85) | 1752.03 (1096.43, 2799.64) | 1.60 (0.87, 2.94) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2081.83 (1367.84, 3168.51) | 1392.85 (893.03, 2172.39) | 1.49 (0.81, 2.76) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 289.96 (209.02, 402.23) | 242.51 (177.54, 331.27) | 1.20 (0.76, 1.88) |

(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 cID80 | 335.47 (251.88, 446.80) | 462.59 (360.18, 594.12) | 0.73 (0.50, 1.06) |

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Table 9d. The ratios of GMTs/GMCs between groups by Age \geq 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 \geq 65, Risk for Severe Covid-19 | | | | | | | |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Vaccine | Negative | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 0.80 (0.80, 0.80) | 0.80 (0.80, 0.80) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 0.15 (0.15, 0.15) | 0.15 (0.15, 0.15) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID50 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.06) | 0.05 (0.05, 0.05) | 1.06 (0.96, 1.18) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 0.80 (0.80, 0.80) | 0.80 (0.80, 0.80) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 0.15 (0.15, 0.15) | 0.15 (0.15, 0.15) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 1.52 (1.31, 1.76) | 1.52 (1.33, 1.74) | 1.00 (0.82, 1.22) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 9.28 (8.27, 10.42) | 9.20 (8.20, 10.32) | 1.01 (0.86, 1.19) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Placebo | Negative | Anti N IgG (BAU/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 \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Placebo | Negative | Anti RBD IgG (BAU/ml) | 0.80 (0.80, 0.80) | 0.80 (0.80, 0.80) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Placebo | Negative | Anti Spike IgG (BAU/ml) | 0.15 (0.15, 0.15) | 0.15 (0.15, 0.15) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID50 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.64 (7.39, 7.91) | 0.98 (0.95, 1.02) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.06) | 0.93 (0.85, 1.03) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 0.81 (0.78, 0.84) | 0.82 (0.78, 0.85) | 0.99 (0.94, 1.05) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 0.15 (0.15, 0.15) | 0.15 (0.15, 0.15) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 1.66 (1.45, 1.91) | 1.66 (1.43, 1.93) | 1.00 (0.82, 1.23) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 9.22 (8.01, 10.60) | 9.17 (8.05, 10.44) | 1.01 (0.83, 1.22) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 102.84 (80.14, 131.98) | 107.45 (84.75, 136.23) | 0.96 (0.68, 1.35) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 1369.34 (1115.31, 1681.23) | 1416.27 (1143.81, 1753.62) | 0.97 (0.72, 1.30) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 779.20 (655.36, 926.44) | 819.89 (684.18, 982.51) | 0.95 (0.74, 1.22) |

(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 cID50 | 27.69 (24.44, 31.37) | 29.02 (25.46, 33.07) | 0.95 (0.80, 1.14) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 37.65 (33.10, 42.82) | 37.98 (33.51, 43.06) | 0.99 (0.83, 1.19) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 215.03 (142.79, 323.81) | 204.03 (131.17, 317.36) | 1.05 (0.58, 1.93) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 2977.08 (2034.61, 4356.13) | 2730.22 (1984.51, 3756.13) | 1.09 (0.66, 1.79) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 1762.27 (1275.34, 2435.10) | 1278.50 (1021.04, 1600.88) | 1.38 (0.93, 2.04) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 55.95 (44.23, 70.77) | 53.97 (43.52, 66.93) | 1.04 (0.75, 1.43) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 71.03 (55.54, 90.85) | 55.87 (44.81, 69.67) | 1.27 (0.91, 1.77) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.25 (1.17, 1.34) | 1.21 (1.21, 1.21) | 1.04 (0.97, 1.11) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 (BAU/ml) | 75.35 (50.45, 112.55) | 76.98 (51.40, 115.29) | 0.98 (0.55, 1.73) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 917.85 (629.03, 1339.28) | 1048.16 (725.71, 1513.87) | 0.88 (0.52, 1.48) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 566.74 (445.20, 721.46) | 499.40 (370.25, 673.59) | 1.13 (0.77, 1.67) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 19.34 (15.80, 23.67) | 19.21 (15.49, 23.82) | 1.01 (0.75, 1.35) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 23.52 (18.82, 29.40) | 28.92 (23.76, 35.22) | 0.81 (0.60, 1.09) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 511.75 (381.45, 686.55) | 596.10 (442.78, 802.51) | 0.86 (0.57, 1.30) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 15978.46 (12608.12, 20249.74) | 19887.87 (15555.85, 25426.29) | 0.80 (0.57, 1.13) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 13176.09 (10726.24, 16185.49) | 12500.59 (10172.50, 15361.49) | 1.05 (0.79, 1.41) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 852.81 (723.19, 1005.66) | 822.13 (693.64, 974.43) | 1.04 (0.82, 1.31) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 787.68 (679.83, 912.64) | 841.31 (730.05, 969.52) | 0.94 (0.76, 1.15) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 2647.77 (1480.53, 4735.25) | 1582.67 (1000.64, 2503.23) | 1.67 (0.80, 3.51) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 68728.43 (41689.06, 113305.43) | 48729.63 (34487.01, 68854.24) | 1.41 (0.77, 2.59) |

(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 (BAU/ml) | 39234.47 (25954.09, 59310.24) | 28578.23 (21460.52, 38056.65) | 1.37 (0.83, 2.27) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 2860.83 (2021.86, 4047.93) | 1980.05 (1553.05, 2524.44) | 1.44 (0.95, 2.21) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 2207.30 (1624.62, 2998.97) | 2089.76 (1666.22, 2620.97) | 1.06 (0.72, 1.55) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.27 (1.16, 1.38) | 1.26 (1.19, 1.33) | 1.01 (0.91, 1.11) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.72 (7.31, 8.16) | 0.97 (0.92, 1.03) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 299.14 (189.84, 471.35) | 457.63 (248.51, 842.70) | 0.65 (0.31, 1.40) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 14365.55 (10202.75, 20226.80) | 14203.36 (9280.26, 21738.13) | 1.01 (0.59, 1.74) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 9328.48 (6731.41, 12927.52) | 10206.80 (7288.69, 14293.21) | 0.91 (0.57, 1.46) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 579.22 (440.09, 762.33) | 682.51 (521.47, 893.29) | 0.85 (0.58, 1.25) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline SARS-CoV-2 | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|---|--------|---------|---------------------|-----------------------|----------------------------|----------------------------|----------------------|
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 628.10 (499.76, 789.42) | 668.62 (520.90, 858.23) | 0.94 (0.67, 1.32) |

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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 (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 0.98 (0.94, 1.02) |
| Male vs Female | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 0.80 (0.80, 0.80) | 0.83 (0.79, 0.87) | 0.97 (0.92, 1.01) |
| Male vs Female | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 0.16 (0.15, 0.16) | 0.16 (0.15, 0.16) | 1.00 (0.97, 1.04) |
| Male vs Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 1.67 (1.45, 1.92) | 1.67 (1.46, 1.91) | 1.00 (0.83, 1.22) |
| Male vs Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 9.61 (8.30, 11.12) | 10.07 (8.92, 11.36) | 0.95 (0.79, 1.16) |
| Male vs Female | Day 1 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.22 (1.20, 1.23) | 0.99 (0.98, 1.01) |
| Male vs Female | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.78 (7.40, 8.18) | 7.67 (7.41, 7.94) | 1.01 (0.95, 1.08) |

(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 (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 0.97 (0.89, 1.05) |
| Male vs Female | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 0.80 (0.79, 0.81) | 0.80 (0.79, 0.81) | 1.00 (0.99, 1.01) |
| Male vs Female | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 0.15 (0.15, 0.15) | 0.15 (0.15, 0.16) | 0.99 (0.98, 1.01) |
| Male vs Female | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 1.44 (1.30, 1.59) | 1.82 (1.57, 2.10) | 0.79 (0.66, 0.95) |
| Male vs Female | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 10.11 (9.02, 11.34) | 9.69 (8.59, 10.92) | 1.04 (0.89, 1.23) |
| Male vs Female | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 38.15 (28.53, 51.02) | 40.32 (32.34, 50.27) | 0.95 (0.66, 1.37) |
| Male vs Female | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 457.64 (371.12, 564.33) | 490.45 (407.20, 590.72) | 0.93 (0.70, 1.24) |
| Male vs Female | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 252.49 (212.53, 299.95) | 278.21 (240.00, 322.50) | 0.91 (0.72, 1.14) |
| Male vs Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID50 | 17.10 (14.87, 19.67) | 17.59 (15.59, 19.83) | 0.97 (0.81, 1.17) |
| Male vs Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 25.48 (22.40, 29.00) | 26.38 (23.82, 29.22) | 0.97 (0.82, 1.14) |
| Male vs Female | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 78.94 (50.06, 124.47) | 83.72 (58.61, 119.58) | 0.94 (0.53, 1.68) |
| Male vs Female | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 664.48 (437.18, 1009.94) | 995.38 (720.00, 1376.06) | 0.67 (0.39, 1.14) |
| Male vs Female | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 438.29 (330.76, 580.78) | 500.15 (395.47, 632.53) | 0.88 (0.60, 1.27) |
| Male vs Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 29.52 (22.97, 37.93) | 35.09 (29.05, 42.38) | 0.84 (0.61, 1.15) |
| Male vs Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 46.32 (37.37, 57.41) | 54.95 (46.08, 65.54) | 0.84 (0.64, 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 |
|----------------|--------|---------|---------------------|-------------------------|-------------------------------|-------------------------------|----------------------|
| Male vs Female | Day 29 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.22 (1.20, 1.24) | 0.99 (0.97, 1.01) |
| Male vs Female | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 23.92 (14.87, 38.48) | 30.29 (21.02, 43.65) | 0.79 (0.43, 1.45) |
| Male vs Female | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 298.61 (197.76, 450.90) | 308.16 (209.13, 454.08) | 0.97 (0.54, 1.72) |
| Male vs Female | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 173.03 (122.78, 243.83) | 167.01 (124.57, 223.90) | 1.04 (0.65, 1.64) |
| Male vs Female | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 10.66 (8.22, 13.83) | 11.99 (9.61, 14.96) | 0.89 (0.63, 1.26) |
| Male vs Female | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 19.86 (16.26, 24.24) | 20.53 (17.22, 24.47) | 0.97 (0.74, 1.26) |
| Male vs Female | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 178.15 (128.55, 246.88) | 163.03 (125.40, 211.94) | 1.09 (0.72, 1.67) |
| Male vs Female | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 4244.31 (3392.29, 5310.33) | 5197.76 (4204.66, 6425.43) | 0.82 (0.60, 1.12) |
| Male vs Female | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 3437.26 (2774.16, 4258.86) | 3345.99 (2766.97, 4046.17) | 1.03 (0.77, 1.38) |
| Male vs Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 441.92 (376.96, 518.07) | 417.64 (359.94, 484.59) | 1.06 (0.85, 1.32) |
| Male vs Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 544.29 (469.26, 631.32) | 581.88 (509.61, 664.40) | 0.94 (0.77, 1.14) |

(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 (BAU/ml) | 556.97 (327.90, 946.06) | 722.64 (442.21, 1180.89) | 0.77 (0.37, 1.59) |
| Male vs Female | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 15154.35 (10160.04, 22603.69) | 17863.54 (12513.50, 25500.93) | 0.85 (0.49, 1.46) |
| Male vs Female | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 10123.18 (7262.75, 14110.20) | 11199.68 (8160.35, 15371.03) | 0.90 (0.57, 1.44) |
| Male vs Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 1249.39 (877.99, 1777.91) | 1261.83 (970.99, 1639.79) | 0.99 (0.64, 1.54) |
| Male vs Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 1549.68 (1188.99, 2019.79) | 1569.32 (1298.20, 1897.06) | 0.99 (0.71, 1.37) |
| Male vs Female | Day 57 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.23 (1.19, 1.27) | 1.26 (1.20, 1.32) | 0.97 (0.92, 1.03) |
| Male vs Female | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.56 (7.46, 7.65) | 0.99 (0.98, 1.01) |
| Male vs Female | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 107.97 (60.07, 194.08) | 157.75 (98.56, 252.50) | 0.68 (0.32, 1.46) |
| Male vs Female | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 2584.72 (1697.12, 3936.53) | 3489.69 (2373.53, 5130.73) | 0.74 (0.41, 1.33) |
| Male vs Female | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2423.64 (1588.60, 3697.60) | 2223.24 (1551.15, 3186.52) | 1.09 (0.62, 1.92) |
| Male vs Female | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 270.04 (197.13, 369.92) | 344.99 (271.92, 437.69) | 0.78 (0.53, 1.17) |
| Male vs Female | Day 57 | Placebo | Positive | Pseudovirus-nAb cID80 | 428.33 (338.81, 541.51) | 480.09 (387.71, 594.47) | 0.89 (0.65, 1.23) |

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 (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 1.01 (0.95, 1.08) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 0.80 (0.80, 0.80) | 0.82 (0.79, 0.84) | 0.98 (0.95, 1.01) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 0.15 (0.15, 0.15) | 0.16 (0.15, 0.16) | 0.99 (0.97, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 1.30 (1.20, 1.41) | 1.70 (1.53, 1.90) | 0.76 (0.67, 0.88) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 8.94 (7.17, 11.14) | 9.92 (8.97, 10.97) | 0.90 (0.71, 1.15) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.22) | 1.00 (0.99, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 8.68 (6.92, 10.87) | 7.56 (7.46, 7.67) | 1.15 (0.91, 1.44) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 0.95 (0.90, 0.99) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 0.81 (0.79, 0.83) | 0.80 (0.79, 0.80) | 1.01 (0.98, 1.04) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 0.15 (0.15, 0.15) | 0.15 (0.15, 0.16) | 0.99 (0.99, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 1.56 (1.22, 2.01) | 1.66 (1.49, 1.85) | 0.94 (0.72, 1.23) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 11.37 (8.64, 14.96) | 9.51 (8.74, 10.34) | 1.20 (0.90, 1.59) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 46.32 (28.82, 74.43) | 38.39 (31.70, 46.50) | 1.21 (0.72, 2.01) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 502.10 (352.24, 715.72) | 466.22 (401.27, 541.69) | 1.08 (0.73, 1.58) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 338.02 (242.86, 470.47) | 258.55 (229.78, 290.93) | 1.31 (0.92, 1.86) |

(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 cID50 | 18.49 (14.43, 23.71) | 17.21 (15.60, 18.99) | 1.07 (0.82, 1.40) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 30.05 (24.15, 37.41) | 25.58 (23.47, 27.88) | 1.17 (0.93, 1.49) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 43.00 (20.21, 91.49) | 85.41 (63.37, 115.13) | 0.50 (0.22, 1.13) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 1004.65 (484.57, 2082.93) | 805.15 (610.19, 1062.40) | 1.25 (0.57, 2.72) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 442.54 (245.55, 797.58) | 462.89 (383.82, 558.25) | 0.96 (0.51, 1.78) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 22.57 (15.32, 33.26) | 33.52 (28.49, 39.45) | 0.67 (0.44, 1.02) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 38.37 (24.64, 59.75) | 51.70 (44.84, 59.62) | 0.74 (0.47, 1.18) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.22 (1.20, 1.23) | 0.99 (0.99, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 25.54 (13.70, 47.59) | 27.97 (20.22, 38.70) | 0.91 (0.45, 1.84) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 338.50 (176.86, 647.86) | 303.85 (222.61, 414.76) | 1.11 (0.54, 2.29) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 173.67 (111.05, 271.61) | 171.82 (134.06, 220.21) | 1.01 (0.60, 1.69) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 10.06 (6.98, 14.48) | 11.72 (9.73, 14.12) | 0.86 (0.57, 1.29) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 21.37 (15.55, 29.37) | 20.30 (17.53, 23.50) | 1.05 (0.74, 1.49) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 162.78 (90.74, 292.01) | 169.83 (136.22, 211.74) | 0.96 (0.51, 1.79) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 6188.84 (4091.31, 9361.73) | 4600.05 (3897.55, 5429.17) | 1.35 (0.86, 2.10) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 4186.98 (2879.54, 6088.08) | 3277.33 (2816.17, 3814.02) | 1.28 (0.85, 1.92) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 567.55 (425.73, 756.63) | 412.28 (366.72, 463.51) | 1.38 (1.01, 1.88) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 690.79 (533.04, 895.23) | 551.24 (495.10, 613.75) | 1.25 (0.95, 1.66) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 483.42 (160.82, 1453.11) | 637.57 (432.60, 939.64) | 0.76 (0.24, 2.44) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 10296.90 (5080.81, 20867.99) | 16777.78 (12636.54, 22276.19) | 0.61 (0.29, 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 |
|--|--------|---------|---------------------|-------------------------|--------------------------------|---------------------------------|----------------------|
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 7610.09 (3673.58, 15764.86) | 10681.93 (8474.58, 13464.24) | 0.71 (0.33, 1.53) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 888.60 (580.47, 1360.29) | 1278.57 (1013.95, 1612.25) | 0.69 (0.43, 1.13) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 1748.56 (1094.71, 2792.95) | 1545.15 (1306.41, 1827.53) | 1.13 (0.69, 1.86) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.35 (1.15, 1.59) | 1.24 (1.20, 1.27) | 1.09 (0.93, 1.29) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.80 (7.24, 8.39) | 7.51 (7.51, 7.51) | 1.04 (0.96, 1.12) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 128.60 (56.95, 290.39) | 140.31 (93.26, 211.10) | 0.92 (0.37, 2.28) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 3323.85 (1770.49, 6240.10) | 2986.56 (2181.24, 4089.20) | 1.11 (0.55, 2.26) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2202.73 (1326.45, 3657.89) | 2446.19 (1807.34, 3310.86) | 0.90 (0.50, 1.63) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 349.80 (194.63, 628.69) | 304.11 (247.38, 373.85) | 1.15 (0.62, 2.14) |

(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 cID80 | 487.73 (302.81, 785.59) | 451.25 (381.67, 533.51) | 1.08 (0.65, 1.79) |

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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 (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.21 (1.21, 1.21) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.05) | 0.05 (0.05, 0.05) | 0.98 (0.94, 1.02) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 0.80 (0.80, 0.80) | 0.83 (0.79, 0.87) | 0.97 (0.92, 1.01) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 0.16 (0.15, 0.16) | 0.15 (0.15, 0.15) | 1.03 (0.99, 1.06) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID50 | 1.62 (1.43, 1.83) | 1.71 (1.48, 1.97) | 0.95 (0.78, 1.14) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb cID80 | 8.58 (7.93, 9.28) | 10.90 (9.44, 12.59) | 0.79 (0.67, 0.93) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.22 (1.20, 1.24) | 1.21 (1.21, 1.21) | 1.01 (0.99, 1.02) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb cID80 | 8.05 (7.49, 8.64) | 7.51 (7.51, 7.51) | 1.07 (1.00, 1.15) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Positive | Anti N IgG (BAU/ml) | 0.05 (0.05, 0.06) | 0.05 (0.05, 0.05) | 1.07 (0.98, 1.17) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 0.80 (0.79, 0.81) | 0.80 (0.80, 0.80) | 1.01 (1.00, 1.02) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 0.16 (0.15, 0.16) | 0.15 (0.15, 0.15) | 1.01 (0.99, 1.03) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb cID50 | 1.69 (1.46, 1.95) | 1.60 (1.40, 1.82) | 1.06 (0.87, 1.28) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb cID80 | 10.64 (9.36, 12.10) | 9.27 (8.31, 10.33) | 1.15 (0.97, 1.36) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (BAU/ml) | 47.88 (38.41, 59.67) | 34.08 (26.39, 44.01) | 1.40 (1.00, 1.97) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 601.72 (499.59, 724.73) | 400.44 (330.41, 485.31) | 1.50 (1.15, 1.96) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 312.83 (267.85, 365.36) | 237.37 (204.22, 275.89) | 1.32 (1.06, 1.64) |

(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 cID50 | 20.20 (18.04, 22.63) | 15.55 (13.64, 17.71) | 1.30 (1.09, 1.54) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb cID80 | 28.84 (25.80, 32.24) | 24.07 (21.54, 26.91) | 1.20 (1.02, 1.40) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (BAU/ml) | 80.72 (53.07, 122.80) | 82.41 (56.70, 119.78) | 0.98 (0.56, 1.72) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 988.93 (705.93, 1385.38) | 752.05 (520.11, 1087.41) | 1.31 (0.80, 2.17) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (BAU/ml) | 422.75 (324.82, 550.21) | 513.05 (403.64, 652.12) | 0.82 (0.58, 1.18) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID50 | 32.03 (25.63, 40.04) | 33.13 (26.98, 40.67) | 0.97 (0.72, 1.31) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb cID80 | 49.02 (40.19, 59.78) | 52.80 (43.78, 63.69) | 0.93 (0.71, 1.22) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.21 (1.21, 1.21) | 1.22 (1.20, 1.24) | 0.99 (0.98, 1.01) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.51 (7.51, 7.51) | 7.51 (7.51, 7.51) | 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 29 | Placebo | Positive | Anti N IgG (BAU/ml) | 27.93 (18.97, 41.13) | 26.72 (17.39, 41.07) | 1.05 (0.58, 1.87) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 352.63 (249.40, 498.60) | 267.93 (174.53, 411.31) | 1.32 (0.75, 2.30) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 155.52 (114.15, 211.87) | 182.62 (133.68, 249.48) | 0.85 (0.55, 1.33) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID50 | 11.40 (9.17, 14.17) | 11.37 (8.85, 14.60) | 1.00 (0.72, 1.40) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb cID80 | 20.39 (17.22, 24.13) | 20.09 (16.51, 24.45) | 1.01 (0.78, 1.31) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (BAU/ml) | 227.46 (171.83, 301.11) | 136.02 (102.81, 179.97) | 1.67 (1.13, 2.48) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (BAU/ml) | 6116.64 (5002.83, 7478.42) | 3965.19 (3190.18, 4928.49) | 1.54 (1.15, 2.08) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (BAU/ml) | 4158.17 (3454.12, 5005.74) | 2905.77 (2384.91, 3540.40) | 1.43 (1.09, 1.88) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID50 | 549.84 (479.76, 630.15) | 355.22 (305.63, 412.85) | 1.55 (1.27, 1.89) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb cID80 | 656.33 (575.68, 748.27) | 506.55 (440.71, 582.22) | 1.30 (1.07, 1.57) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (BAU/ml) | 543.72 (333.11, 887.50) | 735.04 (440.86, 1225.53) | 0.74 (0.37, 1.49) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (BAU/ml) | 15372.49 (10572.42, 22351.88) | 17684.90 (12263.74, 25502.49) | 0.87 (0.52, 1.47) |

(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 (BAU/ml) | 11322.94 (8105.96, 15816.62) | 10349.34 (7588.49, 14114.66) | 1.09 (0.69, 1.73) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID50 | 1181.83 (923.19, 1512.91) | 1312.29 (957.88, 1797.84) | 0.90 (0.60, 1.34) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb cID80 | 1409.31 (1101.23, 1803.57) | 1677.99 (1373.02, 2050.70) | 0.84 (0.61, 1.15) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 1.28 (1.20, 1.36) | 1.22 (1.20, 1.25) | 1.05 (0.98, 1.12) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb cID80 | 7.57 (7.45, 7.69) | 7.51 (7.51, 7.51) | 1.01 (0.99, 1.02) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (BAU/ml) | 127.29 (76.15, 212.77) | 138.49 (81.68, 234.80) | 0.92 (0.44, 1.93) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (BAU/ml) | 3319.09 (2360.16, 4667.65) | 2844.53 (1856.90, 4357.44) | 1.17 (0.68, 2.01) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 2224.20 (1531.96, 3229.24) | 2385.84 (1614.03, 3526.73) | 0.93 (0.54, 1.61) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb cID50 | 311.04 (233.55, 414.23) | 307.89 (235.98, 401.71) | 1.01 (0.68, 1.50) |

(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 cID80 | 465.54 (369.92, 585.87) | 448.64 (360.71, 558.00) | 1.04 (0.75, 1.43) |

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2.10 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 | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------|---------------------|-----|--------|-------------------------|-----------------------|----------------------|----------------------|
| Arm | | | | | | | |
| Vaccine vs Placebo | Negative | - | Day 29 | Anti N IgG (BAU/ml) | 0.62 (0.57, 0.66) | 0.88 (0.85, 0.91) | 0.8 (0.76, 0.83) |
| Vaccine vs Placebo | Negative | - | Day 29 | Anti RBD IgG (BAU/ml) | 0.98 (0.97, 0.99) | 1 (1, 1) | 1 (0.99, 1) |
| Vaccine vs Placebo | Negative | - | Day 29 | Anti Spike IgG (BAU/ml) | 0.99 (0.98, 1) | 1 (1, 1) | 1 (1, 1) |
| Vaccine vs Placebo | Negative | - | Day 29 | Pseudovirus-nAb cID50 | 0.9 (0.86, 0.92) | 0.9 (0.86, 0.92) | 0.77 (0.73, 0.81) |
| Vaccine vs Placebo | Negative | - | Day 29 | Pseudovirus-nAb cID80 | 0.59 (0.55, 0.64) | 0.59 (0.55, 0.64) | 0.3 (0.26, 0.34) |
| Vaccine vs Placebo | Positive | - | Day 29 | Anti N IgG (BAU/ml) | 0.23 (0.12, 0.33) | 0.15 (0.07, 0.23) | 0.14 (0.04, 0.23) |
| Vaccine vs Placebo | Positive | - | Day 29 | Anti RBD IgG (BAU/ml) | 0.05 (0.01, 0.11) | 0 (0, 0) | 0.01 (0, 0.06) |
| Vaccine vs Placebo | Positive | - | Day 29 | Anti Spike IgG (BAU/ml) | 0.02 (-0.02, 0.07) | 0 (0, 0) | 0 (0, 0) |
| Vaccine vs Placebo | Positive | - | Day 29 | Pseudovirus-nAb cID50 | 0.16 (0.08, 0.24) | 0.2 (0.12, 0.27) | 0.27 (0.17, 0.37) |
| Vaccine vs Placebo | Positive | - | Day 29 | Pseudovirus-nAb cID80 | 0.35 (0.24, 0.44) | 0.34 (0.23, 0.44) | 0.36 (0.26, 0.45) |
| Vaccine vs Placebo | Negative | - | Day 57 | Anti N IgG (BAU/ml) | 0.81 (0.77, 0.85) | 0.95 (0.92, 0.97) | 0.91 (0.88, 0.93) |
| Vaccine vs Placebo | Negative | - | Day 57 | Anti RBD IgG (BAU/ml) | 1 (0.99, 1) | 1 (1, 1) | 1 (1, 1) |
| Vaccine vs Placebo | Negative | - | Day 57 | Anti Spike IgG (BAU/ml) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------|---------------------|-----|--------|-------------------------|---------------------|----------------------|---------------------|
| Vaccine vs Placebo | Negative | - | Day 57 | Pseudovirus-nAb cID50 | 1 (0.97, 1) | 1 (0.97, 1) | 1 (1, 1) |
| Vaccine vs Placebo | Negative | - | Day 57 | Pseudovirus-nAb cID80 | 1 (0.98, 1) | 1 (0.98, 1) | 0.99 (0.98, 1) |
| Vaccine vs Placebo | Positive | - | Day 57 | Anti N IgG (BAU/ml) | 0.19 (0.1, 0.27) | 0.08 (0.01, 0.14) | 0.1 (0.03, 0.17) |
| Vaccine vs Placebo | Positive | - | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Vaccine vs Placebo | Positive | - | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Vaccine vs Placebo | Positive | - | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Vaccine vs Placebo | Positive | - | Day 57 | Pseudovirus-nAb cID80 | 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 | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------------------|---------------------|---------|--------|-------------------------|-----------------------|-----------------------|-----------------------|
| Baseline SARS-CoV-2 | | | | | | | |
| Positive vs Negative | - | Vaccine | Day 29 | Anti N IgG (BAU/ml) | 0.14 (0.05, 0.22) | 0.07 (0, 0.11) | 0.07 (-0.01, 0.14) |
| Positive vs Negative | - | Placebo | Day 29 | Anti N IgG (BAU/ml) | 0.54 (0.46, 0.61) | 0.8 (0.72, 0.86) | 0.73 (0.65, 0.8) |
| Positive vs Negative | - | Vaccine | Day 29 | Anti RBD IgG (BAU/ml) | 0.01 (-0.01, 0.03) | 0 (0, 0) | 0 (0, 0.01) |
| Positive vs Negative | - | Placebo | Day 29 | Anti RBD IgG (BAU/ml) | 0.95 (0.88, 0.98) | 1 (1, 1) | 0.99 (0.94, 1) |
| Positive vs Negative | - | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0 (-0.04, 0.02) | 0 (0, 0) | 0 (0, 0) |
| Positive vs Negative | - | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0.97 (0.92, 0.99) | 1 (1, 1) | 1 (1, 1) |
| Positive vs Negative | - | Vaccine | Day 29 | Pseudovirus-nAb cID50 | 0.05 (-0.01, 0.1) | 0.09 (0.03, 0.12) | 0.08 (0, 0.15) |
| Positive vs Negative | - | Placebo | Day 29 | Pseudovirus-nAb cID50 | 0.79 (0.71, 0.85) | 0.79 (0.71, 0.85) | 0.58 (0.5, 0.65) |
| Positive vs Negative | - | Vaccine | Day 29 | Pseudovirus-nAb cID80 | 0.15 (0.06, 0.23) | 0.18 (0.09, 0.26) | 0.23 (0.14, 0.32) |
| Positive vs Negative | - | Placebo | Day 29 | Pseudovirus-nAb cID80 | 0.39 (0.32, 0.47) | 0.43 (0.36, 0.51) | 0.17 (0.12, 0.24) |
| Positive vs Negative | - | Vaccine | Day 57 | Anti N IgG (BAU/ml) | 0.14 (0.08, 0.19) | 0.04 (-0.02, 0.07) | 0.05 (-0.01, 0.09) |
| Positive vs Negative | - | Placebo | Day 57 | Anti N IgG (BAU/ml) | 0.77 (0.69, 0.83) | 0.91 (0.84, 0.95) | 0.86 (0.79, 0.91) |
| Positive vs Negative | - | Vaccine | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0.01) | 0 (0, 0) | 0 (0, 0) |
| Positive vs Negative | - | Placebo | Day 57 | Anti RBD IgG (BAU/ml) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Positive vs Negative | - | Vaccine | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------------|---------------------|---------|--------|-------------------------|----------------|----------------|-------------------|
| Positive vs Negative | - | Placebo | Day 57 | Anti Spike IgG (BAU/ml) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Positive vs Negative | - | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Positive vs Negative | - | Placebo | Day 57 | Pseudovirus-nAb cID50 | 1 (0.97, 1) | 1 (0.97, 1) | 1 (1, 1) |
| Positive vs Negative | - | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0.01 (0, 0.02) |
| Positive vs Negative | - | Placebo | Day 57 | Pseudovirus-nAb cID80 | 1 (0.98, 1) | 1 (0.98, 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 | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------------|---------------------|---------|--------|-------------------------|----------------------|----------------------|----------------------|
| Age | | | | | | | |
| Age ≥ 65 vs Age < 65 | Negative | Vaccine | Day 29 | Anti N IgG (BAU/ml) | 0.23 (0.16, 0.3) | 0.11 (0.06, 0.15) | 0.18 (0.12, 0.23) |
| Age ≥ 65 vs Age < 65 | Negative | Placebo | Day 29 | Anti N IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age ≥ 65 vs Age < 65 | Negative | Vaccine | Day 29 | Anti RBD IgG (BAU/ml) | 0.02 (0.01, 0.04) | 0 (0, 0) | 0 (0, 0.01) |
| Age ≥ 65 vs Age < 65 | Negative | Placebo | Day 29 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age ≥ 65 vs Age < 65 | Negative | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.01 (0, 0.03) | 0 (0, 0) | 0 (0, 0) |
| Age ≥ 65 vs Age < 65 | Negative | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age ≥ 65 vs Age < 65 | Negative | Vaccine | Day 29 | Pseudovirus-nAb cID50 | 0.12 (0.08, 0.16) | 0.12 (0.08, 0.16) | 0.17 (0.11, 0.23) |
| Age ≥ 65 vs Age < 65 | Negative | Placebo | Day 29 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age ≥ 65 vs Age < 65 | Negative | Vaccine | Day 29 | Pseudovirus-nAb cID80 | 0.21 (0.14, 0.28) | 0.21 (0.14, 0.28) | 0.18 (0.11, 0.25) |
| Age ≥ 65 vs Age < 65 | Negative | Placebo | Day 29 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age ≥ 65 vs Age < 65 | Positive | Vaccine | Day 29 | Anti N IgG (BAU/ml) | 0.21 (0.1, 0.31) | 0.07 (0.03, 0.13) | 0.13 (0.05, 0.22) |
| Age ≥ 65 vs Age < 65 | Positive | Placebo | Day 29 | Anti N IgG (BAU/ml) | 0.31 (0.19, 0.43) | 0.2 (0.11, 0.3) | 0.2 (0.1, 0.31) |
| Age ≥ 65 vs Age < 65 | Positive | Vaccine | Day 29 | Anti RBD IgG (BAU/ml) | 0 (0, 0.03) | 0 (0, 0) | 0 (0, 0) |
| Age ≥ 65 vs Age < 65 | Positive | Placebo | Day 29 | Anti RBD IgG (BAU/ml) | 0.07 (0.03, 0.15) | 0 (0, 0) | 0.02 (0, 0.08) |
| Age ≥ 65 vs Age < 65 | Positive | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.01 (0, 0.06) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------------------|---------------------|---------|--------|-------------------------|----------------------|----------------------|-----------------------|
| Age \geq 65 vs Age < 65 | Positive | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0.04 (0.01, 0.1) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID50 | 0.06 (0.03, 0.14) | 0.02 (0, 0.08) | 0.17 (0.08, 0.27) |
| Age \geq 65 vs Age < 65 | Positive | Placebo | Day 29 | Pseudovirus-nAb cID50 | 0.2 (0.1, 0.3) | 0.2 (0.11, 0.3) | 0.32 (0.19, 0.43) |
| Age \geq 65 vs Age < 65 | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID80 | 0.13 (0.02, 0.25) | 0.13 (0.02, 0.24) | 0.11 (-0.03, 0.24) |
| Age \geq 65 vs Age < 65 | Positive | Placebo | Day 29 | Pseudovirus-nAb cID80 | 0.28 (0.15, 0.4) | 0.24 (0.11, 0.36) | 0.1 (-0.01, 0.2) |
| Age \geq 65 vs Age < 65 | Negative | Vaccine | Day 57 | Anti N IgG (BAU/ml) | 0.16 (0.11, 0.21) | 0.06 (0.03, 0.09) | 0.08 (0.05, 0.13) |
| Age \geq 65 vs Age < 65 | Negative | Placebo | Day 57 | Anti N IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Negative | Vaccine | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0.02) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Negative | Placebo | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Negative | Vaccine | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Negative | Placebo | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Negative | Placebo | Day 57 | Pseudovirus-nAb cID50 | 0.02 (0, 0.12) | 0.02 (0, 0.12) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0.01 (0, 0.03) |
| Age \geq 65 vs Age < 65 | Negative | Placebo | Day 57 | Pseudovirus-nAb cID80 | 0.01 (0, 0.08) | 0.01 (0, 0.08) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------------------|---------------------|---------|--------|-------------------------|----------------------|----------------------|----------------------|
| Age \geq 65 vs Age < 65 | Positive | Vaccine | Day 57 | Anti N IgG (BAU/ml) | 0.06 (0.02, 0.13) | 0.02 (0, 0.08) | 0.05 (0.02, 0.12) |
| Age \geq 65 vs Age < 65 | Positive | Placebo | Day 57 | Anti N IgG (BAU/ml) | 0.18 (0.08, 0.29) | 0.09 (0.02, 0.17) | 0.11 (0.02, 0.2) |
| Age \geq 65 vs Age < 65 | Positive | Vaccine | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Positive | Placebo | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Positive | Vaccine | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Positive | Placebo | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Positive | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Positive | Placebo | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Positive | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Age \geq 65 vs Age < 65 | Positive | Placebo | Day 57 | Pseudovirus-nAb cID80 | 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 | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------------------------|---------------------|---------|--------|-------------------------|------------------------|------------------------|-----------------------|
| Risk for Severe Covid-19 | | | | | | | |
| At-risk vs Not at-risk | Negative | Vaccine | Day 29 | Anti N IgG (BAU/ml) | 0.01 (-0.07, 0.1) | 0.02 (-0.04, 0.08) | 0.02 (-0.05, 0.1) |
| At-risk vs Not at-risk | Negative | Placebo | Day 29 | Anti N IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Vaccine | Day 29 | Anti RBD IgG (BAU/ml) | 0 (-0.03, 0.03) | 0 (0, 0) | 0 (-0.02, 0) |
| At-risk vs Not at-risk | Negative | Placebo | Day 29 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | -0.01 (-0.03, 0.03) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Vaccine | Day 29 | Pseudovirus-nAb cID50 | 0.06 (0.01, 0.12) | 0.06 (0.01, 0.12) | 0.02 (-0.05, 0.1) |
| At-risk vs Not at-risk | Negative | Placebo | Day 29 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Vaccine | Day 29 | Pseudovirus-nAb cID80 | 0.09 (0.01, 0.18) | 0.09 (0.01, 0.18) | 0.03 (-0.05, 0.11) |
| At-risk vs Not at-risk | Negative | Placebo | Day 29 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Positive | Vaccine | Day 29 | Anti N IgG (BAU/ml) | -0.09 (-0.23, 0.05) | -0.02 (-0.11, 0.08) | 0 (-0.12, 0.12) |
| At-risk vs Not at-risk | Positive | Placebo | Day 29 | Anti N IgG (BAU/ml) | 0.15 (0, 0.29) | 0.12 (-0.01, 0.24) | 0.04 (-0.09, 0.18) |
| At-risk vs Not at-risk | Positive | Vaccine | Day 29 | Anti RBD IgG (BAU/ml) | -0.01 (-0.07, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Positive | Placebo | Day 29 | Anti RBD IgG (BAU/ml) | 0.06 (-0.02, 0.16) | 0 (0, 0) | 0 (-0.07, 0.09) |
| At-risk vs Not at-risk | Positive | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.01 (0, 0.08) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|------------------------|---------------------|---------|--------|-------------------------|-----------------------|-----------------------|------------------------|
| At-risk vs Not at-risk | Positive | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0.05 (0.02, 0.12) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID50 | 0.04 (-0.05, 0.13) | 0.01 (-0.06, 0.1) | 0.06 (-0.05, 0.19) |
| At-risk vs Not at-risk | Positive | Placebo | Day 29 | Pseudovirus-nAb cID50 | 0.06 (-0.06, 0.19) | 0.07 (-0.06, 0.19) | 0.15 (0, 0.29) |
| At-risk vs Not at-risk | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID80 | 0.04 (-0.09, 0.18) | 0.03 (-0.1, 0.16) | 0.05 (-0.11, 0.2) |
| At-risk vs Not at-risk | Positive | Placebo | Day 29 | Pseudovirus-nAb cID80 | 0.15 (0.01, 0.29) | 0.16 (0.02, 0.3) | -0.03 (-0.14, 0.08) |
| At-risk vs Not at-risk | Negative | Vaccine | Day 57 | Anti N IgG (BAU/ml) | 0.02 (-0.05, 0.09) | 0 (-0.04, 0.05) | -0.01 (-0.07, 0.04) |
| At-risk vs Not at-risk | Negative | Placebo | Day 57 | Anti N IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Vaccine | Day 57 | Anti RBD IgG (BAU/ml) | 0 (-0.03, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Placebo | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Vaccine | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Placebo | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Placebo | Day 57 | Pseudovirus-nAb cID50 | 0.01 (0, 0.08) | 0.01 (0, 0.08) | 0 (0, 0) |
| At-risk vs Not at-risk | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (-0.03, 0.03) |
| At-risk vs Not at-risk | Negative | Placebo | Day 57 | Pseudovirus-nAb cID80 | 0 (-0.03, 0) | 0 (-0.03, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|------------------------|---------------------|---------|--------|-------------------------|-----------------------|-----------------------|-----------------------|
| At-risk vs Not at-risk | Positive | Vaccine | Day 57 | Anti N IgG (BAU/ml) | 0.03 (-0.05, 0.12) | 0.01 (-0.06, 0.1) | 0.02 (-0.06, 0.11) |
| At-risk vs Not at-risk | Positive | Placebo | Day 57 | Anti N IgG (BAU/ml) | 0.13 (0, 0.26) | 0.08 (-0.01, 0.19) | 0.08 (-0.03, 0.19) |
| At-risk vs Not at-risk | Positive | Vaccine | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Positive | Placebo | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Positive | Vaccine | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Positive | Placebo | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Positive | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Positive | Placebo | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Positive | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| At-risk vs Not at-risk | Positive | Placebo | Day 57 | Pseudovirus-nAb cID80 | 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 | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|------------------------|------------------------|------------------------|
| Age < 65, Risk for Severe Covid-19 | | | | | | | |
| Age < 65 At-risk vs Age < 65 Not at-risk | Negative | Vaccine | Day 29 | Anti N IgG (BAU/ml) | -0.01 (-0.12, 0.09) | 0.01 (-0.07, 0.09) | 0.01 (-0.08, 0.1) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Negative | Placebo | Day 29 | Anti N IgG (BAU/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 (BAU/ml) | -0.01 (-0.05, 0.03) | 0 (0, 0) | 0 (-0.03, 0) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Negative | Placebo | Day 29 | Anti RBD IgG (BAU/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 (BAU/ml) | -0.01 (-0.05, 0.03) | 0 (0, 0) | 0 (0, 0) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Negative | Placebo | Day 29 | Anti Spike IgG (BAU/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 cID50 | 0.06 (-0.01, 0.13) | 0.06 (-0.01, 0.13) | 0.01 (-0.09, 0.1) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Negative | Placebo | Day 29 | Pseudovirus-nAb cID50 | 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 cID80 | 0.08 (-0.03, 0.19) | 0.08 (-0.03, 0.19) | 0.01 (-0.09, 0.1) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Negative | Placebo | Day 29 | Pseudovirus-nAb cID80 | 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 (BAU/ml) | -0.15 (-0.32, 0.03) | -0.04 (-0.16, 0.08) | -0.03 (-0.18, 0.12) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|-----------------------|------------------------|-----------------------|
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Placebo | Day 29 | Anti N IgG (BAU/ml) | 0.14 (-0.05, 0.31) | 0.13 (-0.03, 0.28) | 0.03 (-0.14, 0.2) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Vaccine | Day 29 | Anti RBD IgG (BAU/ml) | -0.01 (-0.1, 0) | 0 (0, 0) | 0 (0, 0) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Placebo | Day 29 | Anti RBD IgG (BAU/ml) | 0.07 (-0.04, 0.19) | 0 (0, 0) | 0 (-0.11, 0.11) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.01 (0, 0.09) | 0 (0, 0) | 0 (0, 0) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0.06 (0.02, 0.15) | 0 (0, 0) | 0 (0, 0) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID50 | 0.04 (-0.07, 0.15) | 0.01 (-0.08, 0.12) | 0.07 (-0.09, 0.22) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Placebo | Day 29 | Pseudovirus-nAb cID50 | 0.05 (-0.11, 0.21) | 0.05 (-0.11, 0.21) | 0.15 (-0.04, 0.32) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID80 | 0.02 (-0.15, 0.19) | 0 (-0.17, 0.17) | 0.02 (-0.17, 0.21) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Placebo | Day 29 | Pseudovirus-nAb cID80 | 0.19 (0.01, 0.35) | 0.22 (0.03, 0.38) | -0.04 (-0.18, 0.1) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Negative | Vaccine | Day 57 | Anti N IgG (BAU/ml) | 0 (-0.09, 0.09) | -0.01 (-0.07, 0.05) | -0.03 (-0.1, 0.04) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Negative | Placebo | Day 57 | Anti N IgG (BAU/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 (BAU/ml) | -0.01 (-0.05, 0) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|-----------------------|-----------------------|-----------------------|
| Age < 65 At-risk vs Age < 65 Not at-risk | Negative | Placebo | Day 57 | Anti RBD IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 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 cID50 | 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 cID80 | 0 (0, 0) | 0 (0, 0) | 0 (-0.04, 0.04) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Negative | Placebo | Day 57 | Pseudovirus-nAb cID80 | 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 (BAU/ml) | 0.03 (-0.08, 0.14) | 0.01 (-0.08, 0.12) | 0.02 (-0.09, 0.13) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Placebo | Day 57 | Anti N IgG (BAU/ml) | 0.15 (-0.02, 0.3) | 0.09 (-0.04, 0.21) | 0.08 (-0.06, 0.22) |
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Vaccine | Day 57 | Anti RBD IgG (BAU/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 (BAU/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 (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|-------------|---------------|---------------|
| Age < 65 At-risk vs Age < 65 Not at-risk | Positive | Placebo | Day 57 | Anti Spike IgG (BAU/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 cID50 | 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 cID50 | 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 cID80 | 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 cID80 | 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 | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---|---------------------|---------|--------|-------------------------|------------------------|-----------------------|------------------------|
| Age ≥ 65, Risk for Severe Covid-19 | | | | | | | |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Negative | Vaccine | Day 29 | Anti N IgG (BAU/ml) | -0.02 (-0.11, 0.06) | 0 (-0.05, 0.04) | -0.01 (-0.07, 0.04) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Negative | Placebo | Day 29 | Anti N IgG (BAU/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 (BAU/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 (BAU/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 (BAU/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 (BAU/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 cID50 | 0.01 (-0.02, 0.04) | 0.01 (-0.02, 0.04) | -0.02 (-0.08, 0.04) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Negative | Placebo | Day 29 | Pseudovirus-nAb cID50 | 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 cID80 | 0.04 (-0.05, 0.12) | 0.04 (-0.05, 0.12) | 0.02 (-0.08, 0.12) |
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Negative | Placebo | Day 29 | Pseudovirus-nAb cID80 | 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 (BAU/ml) | -0.01 (-0.13, 0.11) | 0 (0, 0) | 0.05 (0.02, 0.15) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|-----------------------|------------------------|------------------------|
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Positive | Placebo | Day 29 | Anti N IgG (BAU/ml) | 0.04 (-0.12, 0.19) | -0.02 (-0.12, 0.08) | 0 (-0.13, 0.12) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Positive | Vaccine | Day 29 | Anti RBD IgG (BAU/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 (BAU/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 (BAU/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 (BAU/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 cID50 | 0 (0, 0) | 0 (0, 0) | -0.02 (-0.14, 0) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Positive | Placebo | Day 29 | Pseudovirus-nAb cID50 | 0.01 (-0.1, 0.11) | 0.02 (-0.08, 0.12) | 0.02 (-0.12, 0.16) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID80 | 0.06 (-0.09, 0.2) | 0.06 (-0.08, 0.19) | 0.09 (-0.09, 0.27) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Positive | Placebo | Day 29 | Pseudovirus-nAb cID80 | -0.1 (-0.27, 0.08) | -0.12 (-0.28, 0.06) | -0.06 (-0.21, 0.11) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Negative | Vaccine | Day 57 | Anti N IgG (BAU/ml) | 0.01 (-0.04, 0.06) | 0 (-0.03, 0.03) | 0.01 (-0.03, 0.04) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Negative | Placebo | Day 57 | Anti N IgG (BAU/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 (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|------------------------|----------------------|-----------------------|
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Negative | Placebo | Day 57 | Anti RBD IgG (BAU/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 (BAU/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 (BAU/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 cID50 | 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 cID50 | 0.03 (0, 0.21) | 0.03 (0, 0.21) | 0 (0, 0) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 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 cID80 | -0.02 (-0.17, 0) | -0.02 (-0.17, 0) | 0 (0, 0) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 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 N IgG (BAU/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 (BAU/ml) | -0.01 (-0.13, 0.11) | 0.03 (0.01, 0.13) | 0.03 (-0.08, 0.13) |
| Age \geq 65 At-risk vs Age \geq 65 Not at-risk | Positive | Vaccine | Day 57 | Anti RBD IgG (BAU/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 (BAU/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 (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|-------------|---------------|---------------|
| Age ≥ 65 At-risk vs Age ≥ 65 Not at-risk | Positive | Placebo | Day 57 | Anti Spike IgG (BAU/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 cID50 | 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 cID50 | 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 cID80 | 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 cID80 | 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 | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------|---------------------|---------|--------|-------------------------|------------------------|------------------------|------------------------|
| Sex | | | | | | | |
| Male vs Female | Negative | Vaccine | Day 29 | Anti N IgG (BAU/ml) | 0.01 (-0.08, 0.1) | -0.01 (-0.08, 0.05) | -0.02 (-0.1, 0.05) |
| Male vs Female | Negative | Placebo | Day 29 | Anti N IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Negative | Vaccine | Day 29 | Anti RBD IgG (BAU/ml) | 0.01 (-0.02, 0.04) | 0 (0, 0) | 0 (0, 0.01) |
| Male vs Female | Negative | Placebo | Day 29 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Negative | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | -0.01 (-0.05, 0.01) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Negative | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Negative | Vaccine | Day 29 | Pseudovirus-nAb cID50 | -0.01 (-0.07, 0.06) | -0.01 (-0.07, 0.06) | 0.01 (-0.07, 0.09) |
| Male vs Female | Negative | Placebo | Day 29 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Negative | Vaccine | Day 29 | Pseudovirus-nAb cID80 | -0.06 (-0.15, 0.03) | -0.06 (-0.15, 0.03) | -0.01 (-0.09, 0.07) |
| Male vs Female | Negative | Placebo | Day 29 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Positive | Vaccine | Day 29 | Anti N IgG (BAU/ml) | -0.04 (-0.19, 0.1) | -0.03 (-0.14, 0.06) | 0 (-0.13, 0.12) |
| Male vs Female | Positive | Placebo | Day 29 | Anti N IgG (BAU/ml) | -0.04 (-0.2, 0.12) | -0.09 (-0.24, 0.05) | -0.11 (-0.25, 0.04) |
| Male vs Female | Positive | Vaccine | Day 29 | Anti RBD IgG (BAU/ml) | 0.01 (0, 0.04) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Positive | Placebo | Day 29 | Anti RBD IgG (BAU/ml) | 0.06 (-0.07, 0.16) | 0 (0, 0) | 0.03 (0.01, 0.11) |
| Male vs Female | Positive | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | -0.02 (-0.11, 0) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------|---------------------|---------|--------|-------------------------|------------------------|------------------------|------------------------|
| Male vs Female | Positive | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | -0.04 (-0.14, 0.04) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID50 | 0.01 (-0.12, 0.1) | 0.02 (0.01, 0.11) | -0.07 (-0.22, 0.06) |
| Male vs Female | Positive | Placebo | Day 29 | Pseudovirus-nAb cID50 | -0.02 (-0.16, 0.12) | -0.02 (-0.16, 0.12) | -0.05 (-0.21, 0.11) |
| Male vs Female | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID80 | -0.08 (-0.23, 0.07) | -0.13 (-0.28, 0.01) | -0.2 (-0.35, -0.03) |
| Male vs Female | Positive | Placebo | Day 29 | Pseudovirus-nAb cID80 | 0.03 (-0.11, 0.18) | 0.06 (-0.09, 0.22) | -0.04 (-0.15, 0.08) |
| Male vs Female | Negative | Vaccine | Day 57 | Anti N IgG (BAU/ml) | 0.02 (-0.06, 0.1) | 0.01 (-0.04, 0.06) | 0.02 (-0.04, 0.07) |
| Male vs Female | Negative | Placebo | Day 57 | Anti N IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Negative | Vaccine | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0.02) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Negative | Placebo | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Negative | Vaccine | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Negative | Placebo | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Negative | Placebo | Day 57 | Pseudovirus-nAb cID50 | -0.01 (-0.06, 0) | -0.01 (-0.06, 0) | 0 (0, 0) |
| Male vs Female | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0.01 (-0.01, 0.04) |
| Male vs Female | Negative | Placebo | Day 57 | Pseudovirus-nAb cID80 | -0.01 (-0.04, 0) | -0.01 (-0.04, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------|---------------------|---------|--------|-------------------------|------------------------|------------------------|------------------------|
| Male vs Female | Positive | Vaccine | Day 57 | Anti N IgG (BAU/ml) | -0.02 (-0.14, 0.07) | 0.02 (0.01, 0.11) | 0 (-0.12, 0.08) |
| Male vs Female | Positive | Placebo | Day 57 | Anti N IgG (BAU/ml) | -0.07 (-0.21, 0.08) | -0.05 (-0.18, 0.06) | -0.05 (-0.19, 0.07) |
| Male vs Female | Positive | Vaccine | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Positive | Placebo | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Positive | Vaccine | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Positive | Placebo | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Positive | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Positive | Placebo | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Positive | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Male vs Female | Positive | Placebo | Day 57 | Pseudovirus-nAb cID80 | 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 | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|-------------------------|------------------------|------------------------|
| Hispanic or Latino ethnicity | | | | | | | |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Vaccine | Day 29 | Anti N IgG (BAU/ml) | 0.1 (-0.03, 0.21) | -0.03 (-0.16, 0.05) | 0.05 (-0.08, 0.14) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Placebo | Day 29 | Anti N IgG (BAU/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 (BAU/ml) | 0.02 (0.01, 0.04) | 0 (0, 0) | 0 (0, 0.01) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Placebo | Day 29 | Anti RBD IgG (BAU/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 (BAU/ml) | 0.01 (0, 0.03) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Vaccine | Day 29 | Pseudovirus-nAb cID50 | 0.03 (-0.1, 0.09) | 0.03 (-0.1, 0.09) | 0.02 (-0.12, 0.12) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Placebo | Day 29 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Vaccine | Day 29 | Pseudovirus-nAb cID80 | 0.06 (-0.08, 0.18) | 0.06 (-0.08, 0.18) | 0.15 (0.02, 0.28) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Placebo | Day 29 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Vaccine | Day 29 | Anti N IgG (BAU/ml) | -0.24 (-0.47, -0.02) | -0.04 (-0.26, 0.05) | -0.01 (-0.23, 0.11) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|-------------------------|------------------------|------------------------|
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Placebo | Day 29 | Anti N IgG (BAU/ml) | -0.12 (-0.32, 0.1) | 0.08 (-0.16, 0.2) | 0.02 (-0.21, 0.18) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Vaccine | Day 29 | Anti RBD IgG (BAU/ml) | -0.04 (-0.28, -0.01) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Placebo | Day 29 | Anti RBD IgG (BAU/ml) | 0.06 (0.03, 0.14) | 0 (0, 0) | 0.02 (0, 0.07) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.01 (0, 0.05) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | -0.02 (-0.28, 0.05) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID50 | 0.01 (-0.23, 0.08) | -0.03 (-0.27, 0.05) | -0.03 (-0.25, 0.11) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Placebo | Day 29 | Pseudovirus-nAb cID50 | -0.01 (-0.25, 0.14) | -0.01 (-0.25, 0.14) | -0.06 (-0.28, 0.15) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID80 | -0.09 (-0.33, 0.11) | -0.12 (-0.37, 0.07) | -0.06 (-0.28, 0.18) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Placebo | Day 29 | Pseudovirus-nAb cID80 | -0.07 (-0.25, 0.16) | -0.08 (-0.27, 0.14) | 0.02 (-0.12, 0.25) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Vaccine | Day 57 | Anti N IgG (BAU/ml) | 0 (-0.14, 0.09) | 0.02 (-0.11, 0.06) | 0 (-0.12, 0.06) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Placebo | Day 57 | Anti N IgG (BAU/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 (BAU/ml) | 0 (0, 0.01) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|------------------------|------------------------|-----------------------|
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Placebo | Day 57 | Anti RBD IgG (BAU/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 (BAU/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 (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Placebo | Day 57 | Pseudovirus-nAb cID50 | 0 (-0.03, 0) | 0 (-0.03, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (-0.07, 0.02) |
| Hispanic or Latino vs Not Hispanic or Latino | Negative | Placebo | Day 57 | Pseudovirus-nAb cID80 | 0.03 (0, 0.23) | 0.03 (0, 0.23) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Vaccine | Day 57 | Anti N IgG (BAU/ml) | -0.09 (-0.38, 0.03) | -0.03 (-0.27, 0.05) | -0.1 (-0.39, 0.02) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Placebo | Day 57 | Anti N IgG (BAU/ml) | 0.05 (-0.19, 0.2) | 0 (-0.22, 0.1) | 0.06 (-0.17, 0.16) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Vaccine | Day 57 | Anti RBD IgG (BAU/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 (BAU/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 (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|-------------|---------------|---------------|
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Placebo | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Placebo | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive | Placebo | Day 57 | Pseudovirus-nAb cID80 | 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 | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|-----------------------|----------------------|-----------------------|
| Communities of color | | | | | | | |
| Communities of Color vs White Non-Hispanic | Negative | Vaccine | Day 29 | Anti N IgG (BAU/ml) | 0.11 (0.02, 0.19) | 0.08 (0.02, 0.14) | 0.08 (0.01, 0.15) |
| Communities of Color vs White Non-Hispanic | Negative | Placebo | Day 29 | Anti N IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Vaccine | Day 29 | Anti RBD IgG (BAU/ml) | 0.01 (-0.02, 0.04) | 0 (0, 0) | 0 (-0.02, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Placebo | Day 29 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.01 (-0.01, 0.04) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Vaccine | Day 29 | Pseudovirus-nAb cID50 | 0.08 (0.02, 0.14) | 0.08 (0.02, 0.14) | 0.08 (0, 0.15) |
| Communities of Color vs White Non-Hispanic | Negative | Placebo | Day 29 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Vaccine | Day 29 | Pseudovirus-nAb cID80 | 0.09 (0, 0.18) | 0.09 (0, 0.18) | 0.05 (-0.03, 0.13) |
| Communities of Color vs White Non-Hispanic | Negative | Placebo | Day 29 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Positive | Vaccine | Day 29 | Anti N IgG (BAU/ml) | -0.06 (-0.2, 0.08) | 0.01 (-0.08, 0.1) | 0.03 (-0.08, 0.15) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|------------------------|------------------------|------------------------|
| Communities of Color vs White Non-Hispanic | Positive | Placebo | Day 29 | Anti N IgG (BAU/ml) | -0.05 (-0.2, 0.11) | 0.07 (-0.07, 0.2) | 0.05 (-0.09, 0.19) |
| Communities of Color vs White Non-Hispanic | Positive | Vaccine | Day 29 | Anti RBD IgG (BAU/ml) | -0.01 (-0.06, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Positive | Placebo | Day 29 | Anti RBD IgG (BAU/ml) | 0.08 (0, 0.19) | 0 (0, 0) | 0.01 (-0.05, 0.11) |
| Communities of Color vs White Non-Hispanic | Positive | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | -0.02 (-0.11, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Positive | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | -0.03 (-0.11, 0.08) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID50 | 0.04 (-0.05, 0.14) | 0.01 (-0.05, 0.11) | 0.07 (-0.06, 0.2) |
| Communities of Color vs White Non-Hispanic | Positive | Placebo | Day 29 | Pseudovirus-nAb cID50 | -0.03 (-0.17, 0.11) | -0.03 (-0.17, 0.11) | 0.06 (-0.1, 0.21) |
| Communities of Color vs White Non-Hispanic | Positive | Vaccine | Day 29 | Pseudovirus-nAb cID80 | 0.14 (0, 0.27) | 0.09 (-0.04, 0.23) | 0.05 (-0.11, 0.21) |
| Communities of Color vs White Non-Hispanic | Positive | Placebo | Day 29 | Pseudovirus-nAb cID80 | -0.03 (-0.18, 0.11) | -0.05 (-0.2, 0.1) | -0.03 (-0.15, 0.09) |
| Communities of Color vs White Non-Hispanic | Negative | Vaccine | Day 57 | Anti N IgG (BAU/ml) | 0.05 (-0.02, 0.13) | 0.04 (0, 0.08) | 0.03 (-0.02, 0.09) |
| Communities of Color vs White Non-Hispanic | Negative | Placebo | Day 57 | Anti N IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Vaccine | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0.02) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|----------------------|-----------------------|-----------------------|
| Communities of Color vs White Non-Hispanic | Negative | Placebo | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Vaccine | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Placebo | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Placebo | Day 57 | Pseudovirus-nAb cID50 | -0.01 (-0.05, 0) | -0.01 (-0.05, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Negative | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0.01 (-0.01, 0.04) |
| Communities of Color vs White Non-Hispanic | Negative | Placebo | Day 57 | Pseudovirus-nAb cID80 | 0.01 (0, 0.05) | 0.01 (0, 0.05) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Positive | Vaccine | Day 57 | Anti N IgG (BAU/ml) | 0 (-0.09, 0.1) | 0.01 (-0.05, 0.11) | 0.02 (-0.07, 0.12) |
| Communities of Color vs White Non-Hispanic | Positive | Placebo | Day 57 | Anti N IgG (BAU/ml) | 0.04 (-0.1, 0.19) | 0 (-0.12, 0.11) | 0.02 (-0.1, 0.15) |
| Communities of Color vs White Non-Hispanic | Positive | Vaccine | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Positive | Placebo | Day 57 | Anti RBD IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Positive | Vaccine | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |

(continued)

| Comparison | Baseline SARS-CoV-2 | Arm | Visit | Marker | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|---------------------|---------|--------|-------------------------|-------------|---------------|---------------|
| Communities of Color vs White Non-Hispanic | Positive | Placebo | Day 57 | Anti Spike IgG (BAU/ml) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Positive | Vaccine | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Positive | Placebo | Day 57 | Pseudovirus-nAb cID50 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Positive | Vaccine | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |
| Communities of Color vs White Non-Hispanic | Positive | Placebo | Day 57 | Pseudovirus-nAb cID80 | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) |

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

2.11 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 | | | |
| | | N | Resp rate | GMT/GMC | N | Resp rate | GMT/GMC | Resp Rate Difference | GMTR/GMCR |
| Day 29 | Anti N IgG (BAU/ml) | 747 | 6899.3/11127 = 62.0% (57.4%, 66.4%) | 39.38 (33.04, 46.94) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.05 (0.05, 0.05) | 0.62 (0.57, 0.66) | 840.26 (704.94, 1001.55) |
| Day 29 | Anti RBD IgG (BAU/ml) | 747 | 10953.9/11127 = 98.4% (96.6%, 99.3%) | 476.21 (415.28, 546.08) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.80 (0.80, 0.80) | 0.98 (0.97, 0.99) | 597.64 (521.17, 685.33) |
| Day 29 | Anti Spike IgG (BAU/ml) | 747 | 11038.8/11127 = 99.2% (97.7%, 99.7%) | 266.96 (239.24, 297.88) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.15 (0.15, 0.15) | 0.99 (0.98, 1) | 1735.75 (1555.55, 1936.82) |
| Day 29 | Pseudovirus-nAb cID50 | 747 | 9987.8/11127 = 89.8% (86.3%, 92.5%) | 17.38 (15.88, 19.02) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 1.22 (1.20, 1.23) | 0.9 (0.86, 0.92) | 14.30 (13.06, 15.66) |
| Day 29 | Pseudovirus-nAb cID80 | 747 | 6579.2/11127 = 59.1% (54.6%, 63.5%) | 26.00 (24.01, 28.15) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 7.51 (7.51, 7.51) | 0.59 (0.55, 0.64) | 3.46 (3.20, 3.75) |
| Day 57 | Anti N IgG (BAU/ml) | 747 | 9051.8/11127 = 81.4% (77.3%, 84.8%) | 169.29 (138.13, 207.49) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.05 (0.05, 0.05) | 0.81 (0.77, 0.85) | 3611.85 (2946.99, 4426.71) |
| Day 57 | Anti RBD IgG (BAU/ml) | 747 | 11107.3/11127 = 99.8% (98.7%, 100.0%) | 4768.44 (4097.10, 5549.78) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.80 (0.80, 0.80) | 1 (0.99, 1) | 5984.31 (5141.78, 6964.88) |
| Day 57 | Anti Spike IgG (BAU/ml) | 747 | 11127/11127 = 100.0% (100.0%, 100.0%) | 3384.52 (2945.38, 3889.12) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.15 (0.15, 0.15) | 1 (1, 1) | 22005.96 (19150.73, 25286.89) |
| Day 57 | Pseudovirus-nAb cID50 | 747 | 11127/11127 = 100.0% (100.0%, 100.0%) | 427.80 (384.20, 476.35) | 138 | 47.7/11103 = 0.4% (0.1%, 3.0%) | 1.25 (1.21, 1.28) | 1 (0.97, 1) | 343.51 (307.33, 383.95) |

| | | | | | | | | | |
|-----------|-----------------------|-----|--|----------------------------|-----|-----------------------------------|----------------------|----------------|-------------------------|
| Day 57 | Pseudovirus-nAb cID80 | 747 | 11127/11127 = 100.0% (100.0%, 100.0%) | 565.58 (512.62, 624.02) | 138 | 32.8/11103 = 0.3% (0.0%, 2.1%) | 7.54 (7.49, 7.58) | 1 (0.98, 1) | 75.06 (68.02, 82.83) |
|-----------|-----------------------|-----|--|----------------------------|-----|-----------------------------------|----------------------|----------------|-------------------------|

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

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2.12 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 | | | | | | | |
|--------|-------------------------|------------------------------|--|----------------------------------|-----|--|-------------------------------|-----------------------|----------------------|
| | | Vaccine | | | | Placebo | | | |
| | | N | Resp rate | GMT/GMC | N | Resp rate | GMT/GMC | Resp Rate Difference | GMTR/GMCR |
| Day 29 | Anti N IgG (BAU/ml) | 234 | 940.6/1234 = 76.2% (68.6%, 82.5%) | 81.71 (61.73, 108.16) | 241 | 602.3/1125 = 53.5% (45.7%, 61.2%) | 27.27 (20.41, 36.44) | 0.23 (0.12, 0.33) | 3.00 (2.00, 4.48) |
| Day 29 | Anti RBD IgG (BAU/ml) | 234 | 1229.4/1234 = 99.6% (97.4%, 99.9%) | 842.22 (650.71, 1090.08) | 241 | 1064/1125 = 94.6% (88.4%, 97.6%) | 303.87 (230.21, 401.11) | 0.05 (0.01, 0.11) | 2.77 (1.90, 4.05) |
| Day 29 | Anti Spike IgG (BAU/ml) | 234 | 1225.4/1234 = 99.3% (95.1%, 99.9%) | 473.58 (396.77, 565.26) | 241 | 1090.8/1125 = 97.0% (92.1%, 98.9%) | 169.66 (136.33, 211.14) | 0.02 (-0.02, 0.07) | 2.79 (2.11, 3.70) |
| Day 29 | Pseudovirus-nAb cID50 | 234 | 1174.4/1234 = 95.2% (89.1%, 97.9%) | 32.67 (28.06, 38.03) | 241 | 887.2/1125 = 78.9% (71.2%, 84.9%) | 11.38 (9.63, 13.45) | 0.16 (0.08, 0.24) | 2.87 (2.29, 3.60) |
| Day 29 | Pseudovirus-nAb cID80 | 234 | 915.8/1234 = 74.2% (66.2%, 80.9%) | 51.20 (44.63, 58.75) | 241 | 443.5/1125 = 39.4% (32.4%, 46.9%) | 20.22 (17.73, 23.07) | 0.35 (0.24, 0.44) | 2.53 (2.09, 3.06) |
| Day 57 | Anti N IgG (BAU/ml) | 234 | 1179.1/1234 = 95.5% (89.9%, 98.1%) | 648.88 (451.21, 933.14) | 241 | 863.2/1125 = 76.7% (68.9%, 83.0%) | 133.24 (92.21, 192.52) | 0.19 (0.1, 0.27) | 4.87 (2.90, 8.17) |
| Day 57 | Anti RBD IgG (BAU/ml) | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 16689.18 (12811.64, 21740.29) | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 3052.94 (2308.16, 4038.04) | 0 (0, 0) | 5.47 (3.72, 8.03) |
| Day 57 | Anti Spike IgG (BAU/ml) | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 10741.38 (8558.81, 13480.53) | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 2310.36 (1764.78, 3024.62) | 0 (0, 0) | 4.65 (3.27, 6.61) |
| Day 57 | Pseudovirus-nAb cID50 | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 1256.68 (1017.71, 1551.75) | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 309.33 (255.18, 374.97) | 0 (0, 0) | 4.06 (3.05, 5.40) |

| | | | | | | | | | |
|-----------|-----------------------|-----|--|-------------------------------|-----|--|----------------------------|-------------|----------------------|
| Day 57 | Pseudovirus-nAb cID80 | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 1561.17 (1336.08, 1824.18) | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 456.31 (389.81, 534.14) | 0 (0, 0) | 3.42 (2.74, 4.27) |
|-----------|-----------------------|-----|--|-------------------------------|-----|--|----------------------------|-------------|----------------------|

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



2.13 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 (BAU/ml) | 234 | 940.6/1234 = 76.2% (68.6%, 82.5%) | 81.71 (61.73, 108.16) | 747 | 6899.3/11127 = 62.0% (57.4%, 66.4%) | 39.38 (33.04, 46.94) | 0.14 (0.05, 0.22) | 2.07 (1.49, 2.89) |
| Day 29 | Anti RBD IgG (BAU/ml) | 234 | 1229.4/1234 = 99.6% (97.4%, 99.9%) | 842.22 (650.71, 1090.08) | 747 | 10953.9/11127 = 98.4% (96.6%, 99.3%) | 476.21 (415.28, 546.08) | 0.01 (-0.01, 0.03) | 1.77 (1.32, 2.37) |
| Day 29 | Anti Spike IgG (BAU/ml) | 234 | 1225.4/1234 = 99.3% (95.1%, 99.9%) | 473.58 (396.77, 565.26) | 747 | 11038.8/11127 = 99.2% (97.7%, 99.7%) | 266.96 (239.24, 297.88) | 0 (-0.04, 0.02) | 1.77 (1.44, 2.18) |
| Day 29 | Pseudovirus-nAb cID50 | 234 | 1174.4/1234 = 95.2% (89.1%, 97.9%) | 32.67 (28.06, 38.03) | 747 | 9987.8/11127 = 89.8% (86.3%, 92.5%) | 17.38 (15.88, 19.02) | 0.05 (-0.01, 0.1) | 1.88 (1.58, 2.24) |
| Day 29 | Pseudovirus-nAb cID80 | 234 | 915.8/1234 = 74.2% (66.2%, 80.9%) | 51.20 (44.63, 58.75) | 747 | 6579.2/11127 = 59.1% (54.6%, 63.5%) | 26.00 (24.01, 28.15) | 0.15 (0.06, 0.23) | 1.97 (1.68, 2.31) |
| Day 57 | Anti N IgG (BAU/ml) | 234 | 1179.1/1234 = 95.5% (89.9%, 98.1%) | 648.88 (451.21, 933.14) | 747 | 9051.8/11127 = 81.4% (77.3%, 84.8%) | 169.29 (138.13, 207.49) | 0.14 (0.08, 0.19) | 3.83 (2.53, 5.81) |
| Day 57 | Anti RBD IgG (BAU/ml) | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 16689.18 (12811.64, 21740.29) | 747 | 11107.3/11127 = 99.8% (98.7%, 100.0%) | 4768.44 (4097.10, 5549.78) | 0 (0, 0.01) | 3.50 (2.58, 4.75) |
| Day 57 | Anti Spike IgG (BAU/ml) | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 10741.38 (8558.81, 13480.53) | 747 | 11127/11127 = 100.0% (100.0%, 100.0%) | 3384.52 (2945.38, 3889.12) | 0 (0, 0) | 3.17 (2.43, 4.14) |
| Day 57 | Pseudovirus-nAb cID50 | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 1256.68 (1017.71, 1551.75) | 747 | 11127/11127 = 100.0% (100.0%, 100.0%) | 427.80 (384.20, 476.35) | 0 (0, 0) | 2.94 (2.32, 3.72) |

| | | | | | | | | | |
|-----------|-----------------------|-----|--|-------------------------------|-----|--|----------------------------|-------------|----------------------|
| Day 57 | Pseudovirus-nAb cID80 | 234 | 1234/1234 = 100.0% (100.0%, 100.0%) | 1561.17 (1336.08, 1824.18) | 747 | 11127/11127 = 100.0% (100.0%, 100.0%) | 565.58 (512.62, 624.02) | 0 (0, 0) | 2.76 (2.30, 3.32) |
|-----------|-----------------------|-----|--|-------------------------------|-----|--|----------------------------|-------------|----------------------|

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



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

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

| Visit | Marker | Placebo Recipients | | | | | | | |
|--------|-------------------------|------------------------------|--|-------------------------------|-----|-----------------------------------|----------------------|----------------------|----------------------------------|
| | | Baseline SARS-CoV-2 Positive | | | | Baseline SARS-CoV-2 Negative | | | |
| | | N | Resp rate | GMT/GMC | N | Resp rate | GMT/GMC | Resp Rate Difference | GMTR/GMCR |
| Day 29 | Anti N IgG (BAU/ml) | 241 | 602.3/1125 = 53.5% (45.7%, 61.2%) | 27.27 (20.41, 36.44) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.05 (0.05, 0.05) | 0.54 (0.46, 0.61) | 581.80 (435.39, 777.44) |
| Day 29 | Anti RBD IgG (BAU/ml) | 241 | 1064/1125 = 94.6% (88.4%, 97.6%) | 303.87 (230.21, 401.11) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.80 (0.80, 0.80) | 0.95 (0.88, 0.98) | 381.35 (288.91, 503.38) |
| Day 29 | Anti Spike IgG (BAU/ml) | 241 | 1090.8/1125 = 97.0% (92.1%, 98.9%) | 169.66 (136.33, 211.14) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.15 (0.15, 0.15) | 0.97 (0.92, 0.99) | 1103.13 (886.42, 1372.81) |
| Day 29 | Pseudovirus-nAb cID50 | 241 | 887.2/1125 = 78.9% (71.2%, 84.9%) | 11.38 (9.63, 13.45) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 1.22 (1.20, 1.23) | 0.79 (0.71, 0.85) | 9.36 (7.92, 11.06) |
| Day 29 | Pseudovirus-nAb cID80 | 241 | 443.5/1125 = 39.4% (32.4%, 46.9%) | 20.22 (17.73, 23.07) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 7.51 (7.51, 7.51) | 0.39 (0.32, 0.47) | 2.69 (2.36, 3.07) |
| Day 57 | Anti N IgG (BAU/ml) | 241 | 863.2/1125 = 76.7% (68.9%, 83.0%) | 133.24 (92.21, 192.52) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.05 (0.05, 0.05) | 0.77 (0.69, 0.83) | 2842.63 (1967.38, 4107.28) |
| Day 57 | Anti RBD IgG (BAU/ml) | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 3052.94 (2308.16, 4038.04) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.80 (0.80, 0.80) | 1 (1, 1) | 3831.38 (2896.69, 5067.66) |
| Day 57 | Anti Spike IgG (BAU/ml) | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 2310.36 (1764.78, 3024.62) | 138 | 0/11103 = 0.0% (0.0%, 0.0%) | 0.15 (0.15, 0.15) | 1 (1, 1) | 15021.86 (11474.48, 19665.93) |
| Day 57 | Pseudovirus-nAb cID50 | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 309.33 (255.18, 374.97) | 138 | 47.7/11103 = 0.4% (0.1%, 3.0%) | 1.25 (1.21, 1.28) | 1 (0.97, 1) | 248.39 (204.47, 301.74) |

| | | | | | | | | | |
|-----------|-----------------------|-----|--|----------------------------|-----|-----------------------------------|----------------------|----------------|-------------------------|
| Day 57 | Pseudovirus-nAb cID80 | 241 | 1125/1125 = 100.0% (100.0%, 100.0%) | 456.31 (389.81, 534.14) | 138 | 32.8/11103 = 0.3% (0.0%, 2.1%) | 7.54 (7.49, 7.58) | 1 (0.98, 1) | 60.56 (51.73, 70.90) |
|-----------|-----------------------|-----|--|----------------------------|-----|-----------------------------------|----------------------|----------------|-------------------------|

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



MOCK

Chapter 3

Graphical Description of Immunogenicity Data

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

3.1.1 Baseline SARS-CoV-2 Negative



Figure 3.1: Pair plots of D29 Ab markers: baseline negative vaccine arm



Figure 3.2: Pair plots of D57 Ab markers: baseline negative vaccine arm

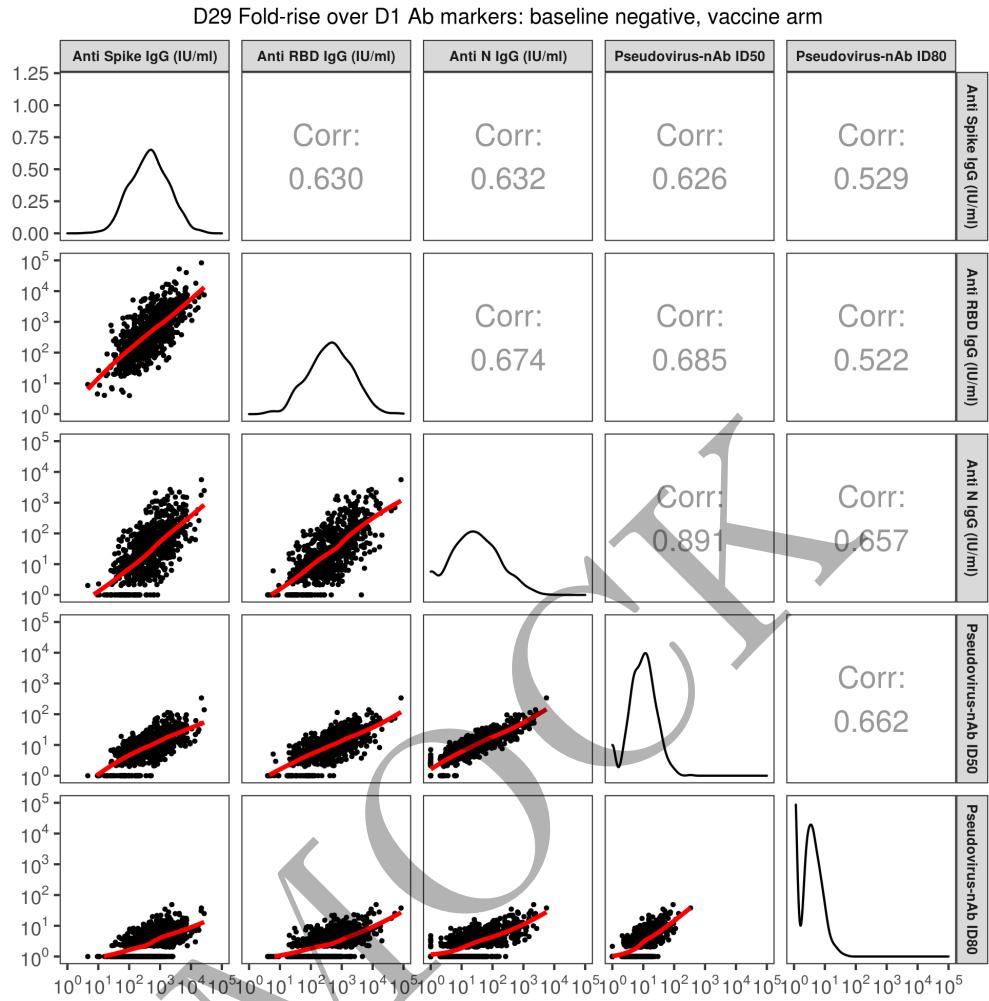


Figure 3.3: Pair plots of D29 fold-rise over D1 Ab markers: baseline negative vaccine arm



Figure 3.4: Pair plots of D57 fold-rise over D1 Ab markers: baseline negative vaccine arm



Figure 3.5: Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline negative vaccine arm



Figure 3.6: Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative vaccine arm

Binding Antibody to RBD: baseline negative vaccine arm

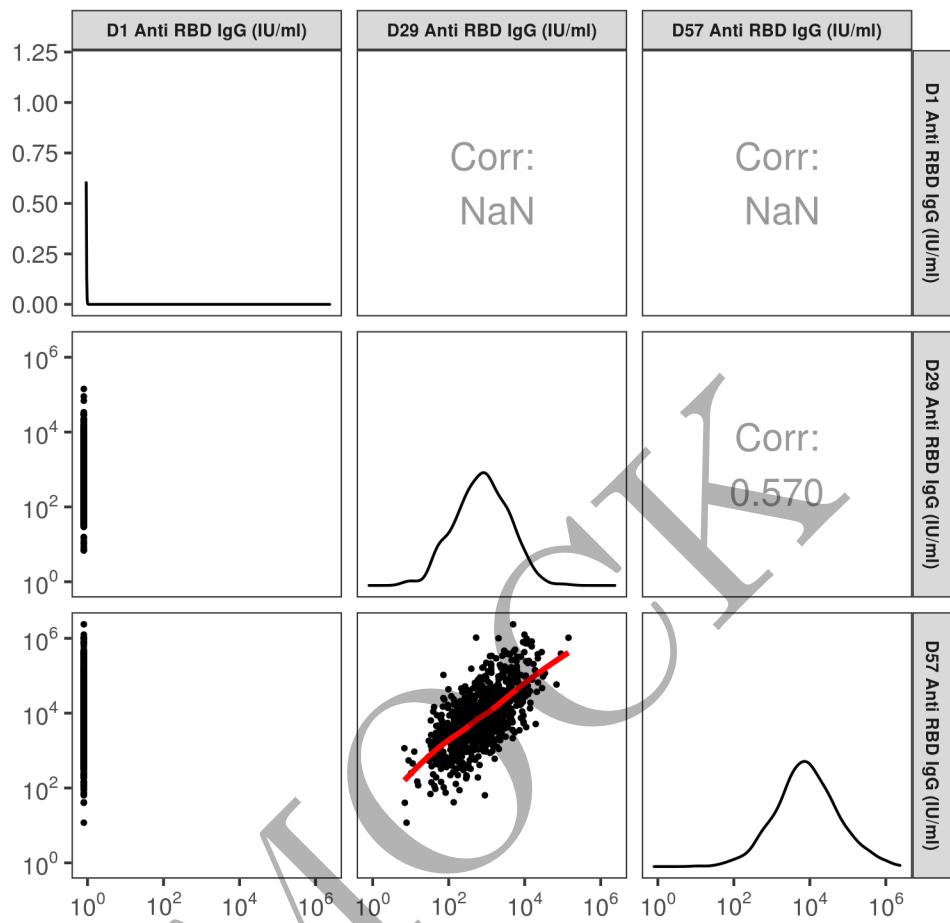


Figure 3.7: Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative vaccine arm



Figure 3.8: Pair plots of D1, D29 and D57 nAb Neutralization 50% Titer: baseline negative vaccine arm



Figure 3.9: Pair plots of D1, D29 and D57 nAb Neutralization 80% Titer: Baseline negative vaccine arm

3.1.2 Baseline SARS-CoV-2 Positive



Figure 3.10: Pair plots of D29 Ab markers: baseline positive vaccine arm



Figure 3.11: Pair plots of D57 Ab markers: baseline positive vaccine arm



Figure 3.12: Pair plots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm



Figure 3.13: Pair plots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm



Figure 3.14: Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline positive vaccine arm



Figure 3.15: Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline positive vaccine arm

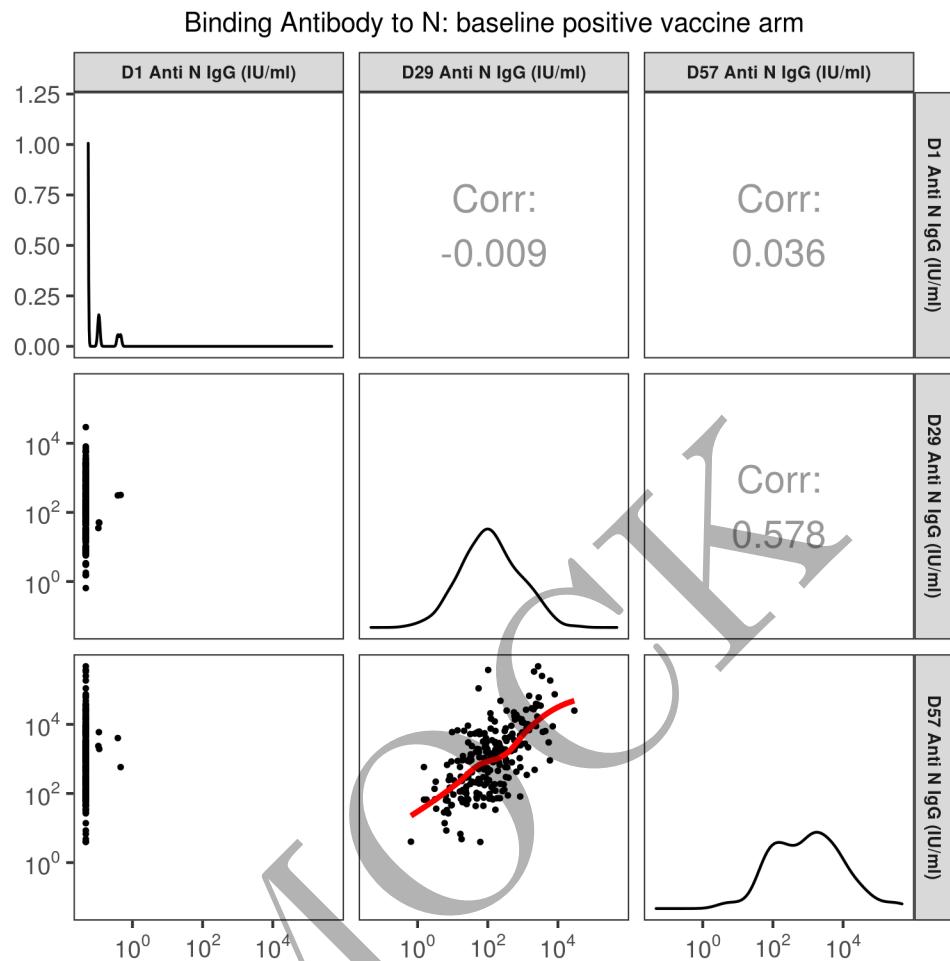


Figure 3.16: Pair plots of D1, D29 and D57 Binding Antibody to N: baseline positive vaccine arm

PsV Neutralization 50% Titer: baseline positive vaccine arm



Figure 3.17: Pair plots of D1, D29 and D57 nAb Neutralization 50% Titer: baseline positive vaccine arm

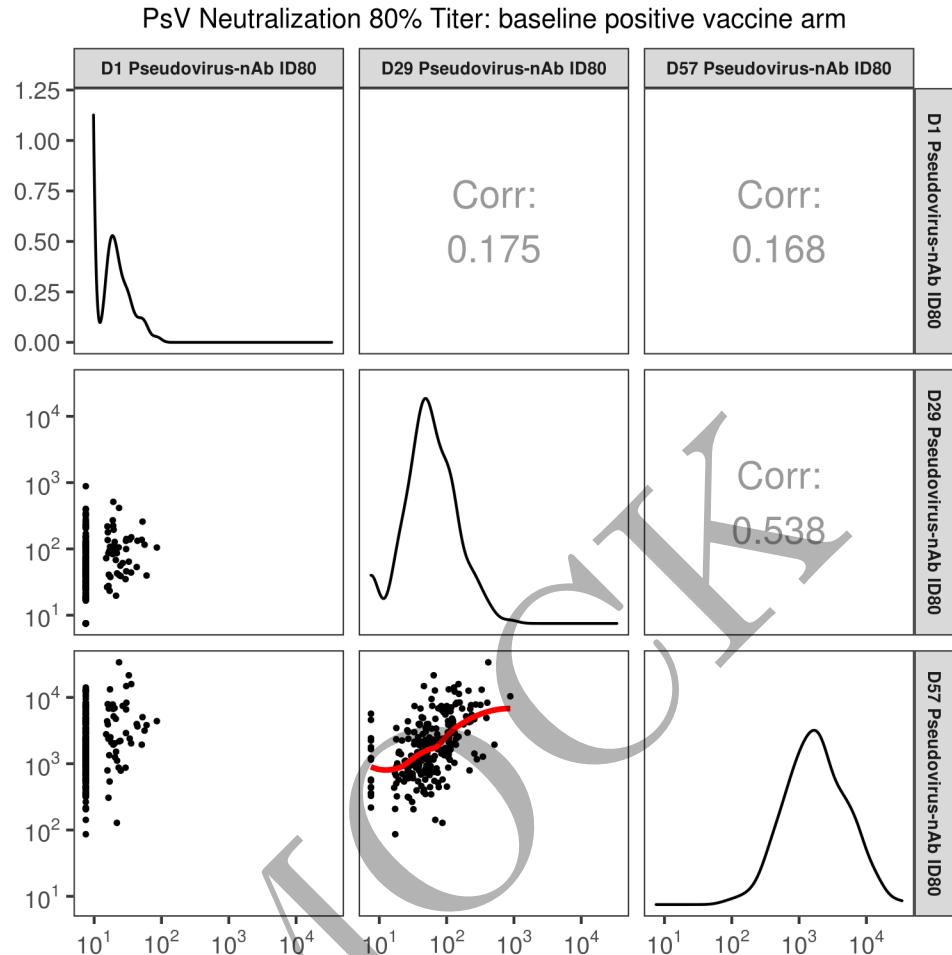


Figure 3.18: Pair plots of D1, D29 and D57 nAb Neutralization 80% Titer: Baseline positive vaccine arm

3.1.3 Baseline SARS-CoV-2 Positive Placebo Arm



Figure 3.19: Pair plots of D29 Ab markers: baseline positive placebo arm



Figure 3.20: Pair plots of D57 Ab markers: baseline positive placebo arm



Figure 3.21: Pair plots of D29 fold-rise over D1 Ab markers: baseline positive placebo arm



Figure 3.22: Pair plots of D57 fold-rise over D1 Ab markers: baseline positive placebo arm

Binding Antibody to Spike: baseline positive placebo arm



Figure 3.23: Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline positive placebo arm



Figure 3.24: Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline positive placebo arm



Figure 3.25: Pair plots of D1, D29 and D57 Binding Antibody to N: baseline positive placebo arm

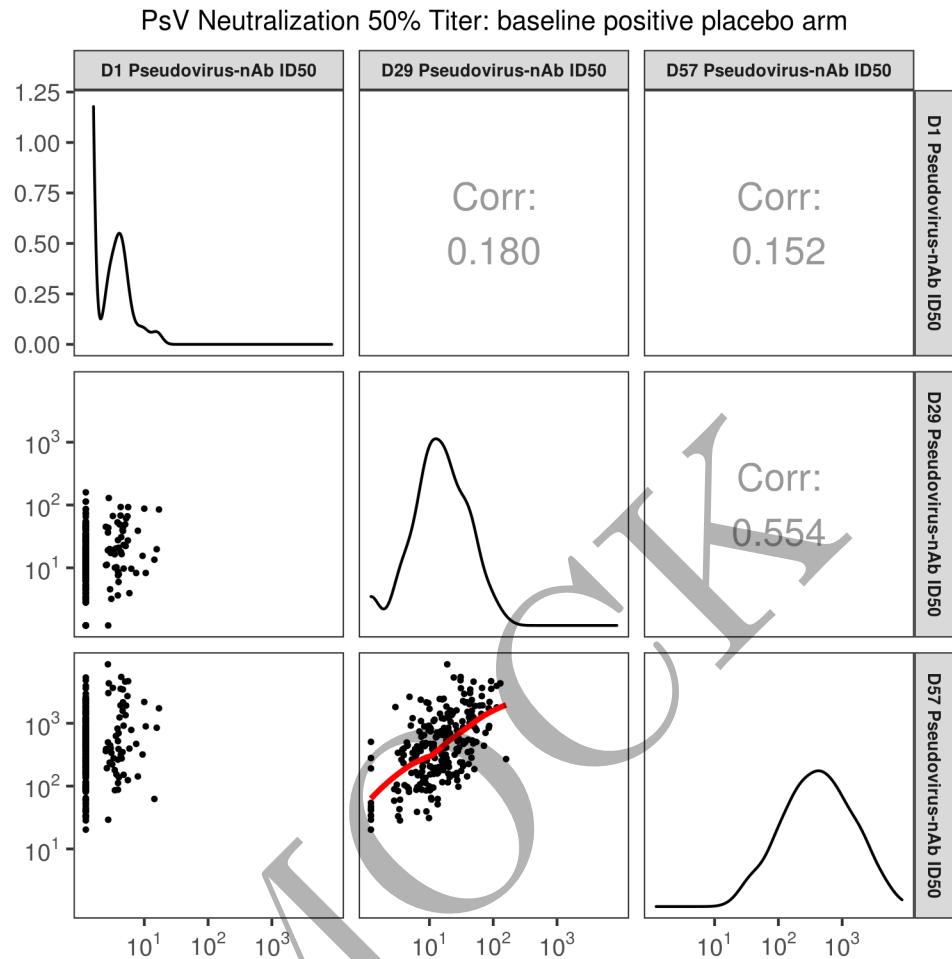


Figure 3.26: Pair plots of D1, D29 and D57 nAb Neutralization 50% Titer: baseline positive placebo arm

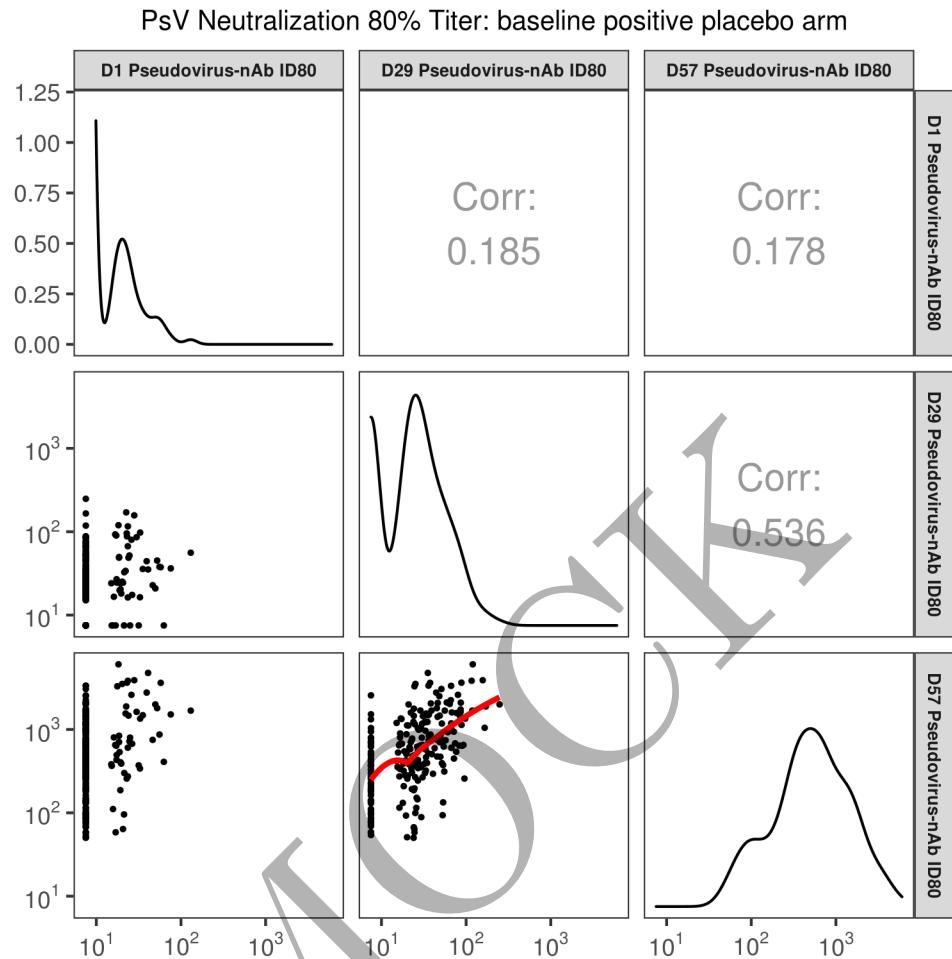


Figure 3.27: Pair plots of D1, D29 and D57 nAb Neutralization 80% Titer: Baseline positive placebo arm

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



Figure 3.28: RCDF plots for D29 Ab markers: by baseline status x randomization arm



Figure 3.29: RCDF plots for D57 Ab markers: by baseline status x randomization arm



Figure 3.30: RCDF plots for D29 fold-rise over D1 Ab markers: by baseline status x randomization arm



Figure 3.31: RCDF plots for D57 fold-rise over D1 Ab markers: by baseline status x randomization arm

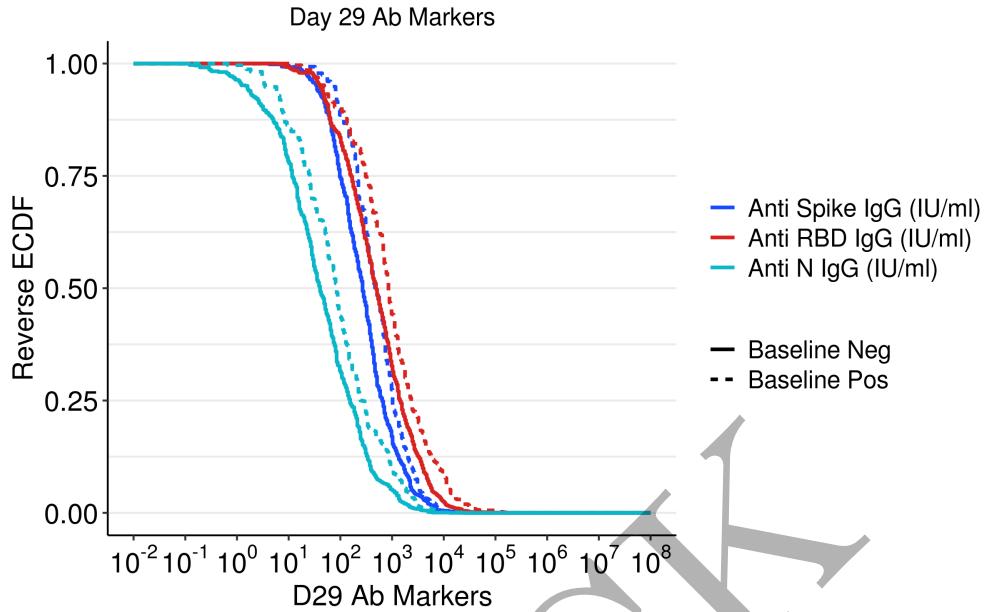


Figure 3.32: RCDF plots for D29 bAb markers: by baseline status for the vaccine arm

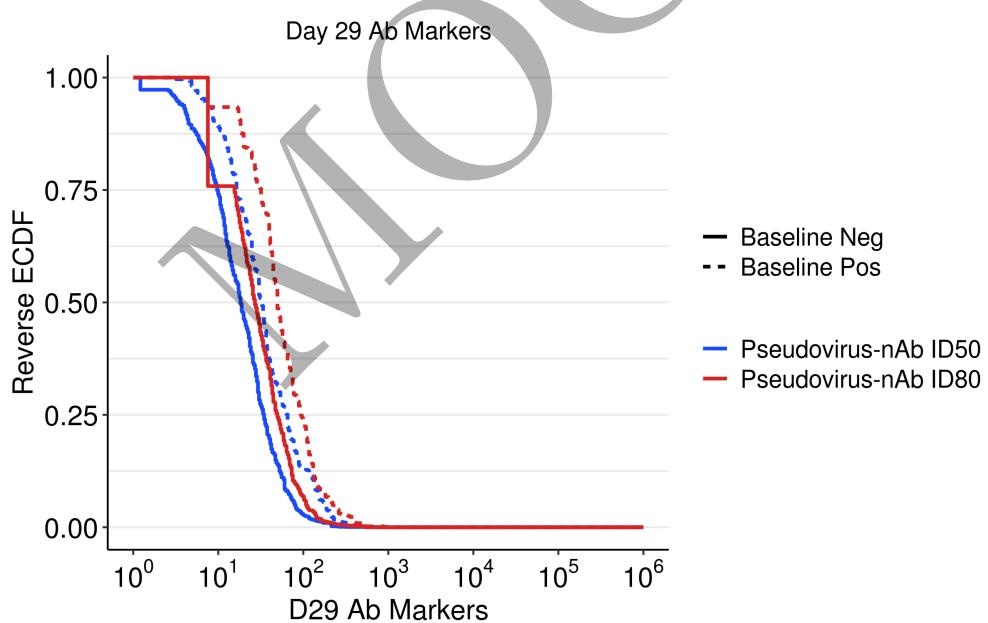


Figure 3.33: RCDF plots for D29 nAb markers: by baseline status for the vaccine arm



Figure 3.34: RCDF plots for D57 bAb markers: by baseline status for the vaccine arm

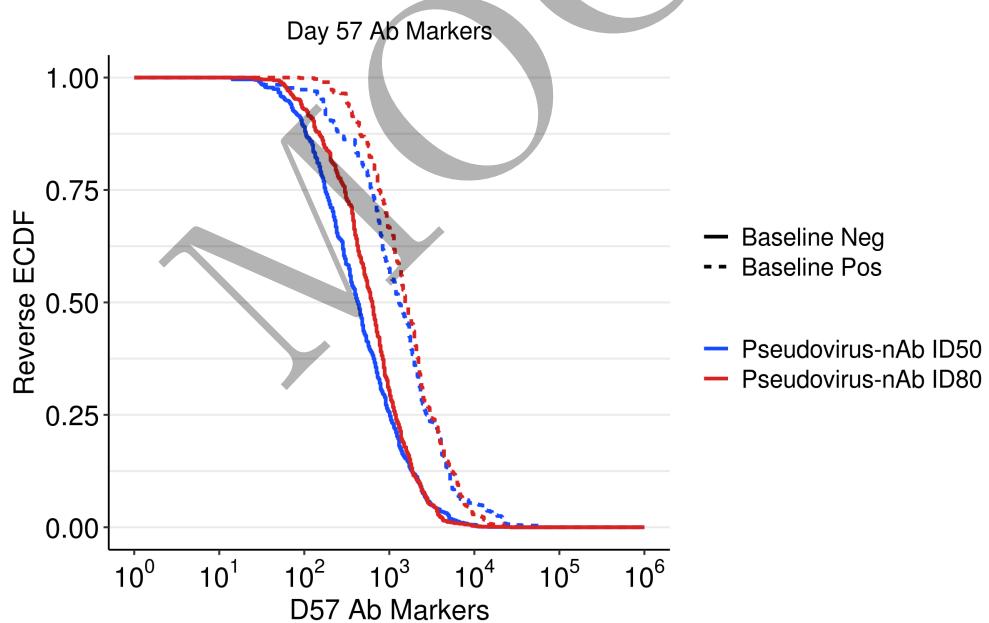


Figure 3.35: RCDF plots for D57 nAb markers: by baseline status for the vaccine arm

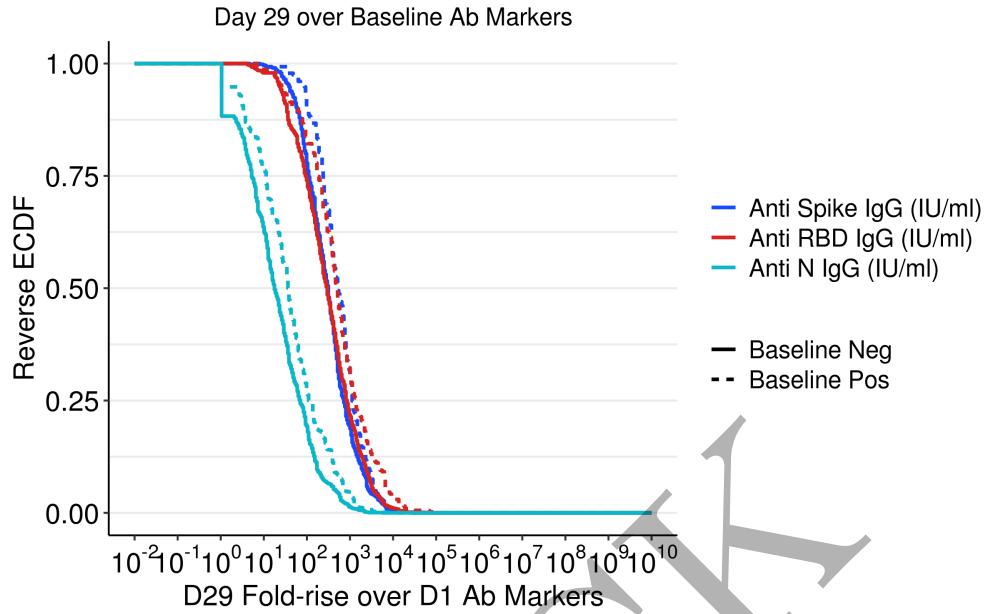


Figure 3.36: RCDF plots for D29 over D1 fold-rise bAb markers: by baseline status for the vaccine arm

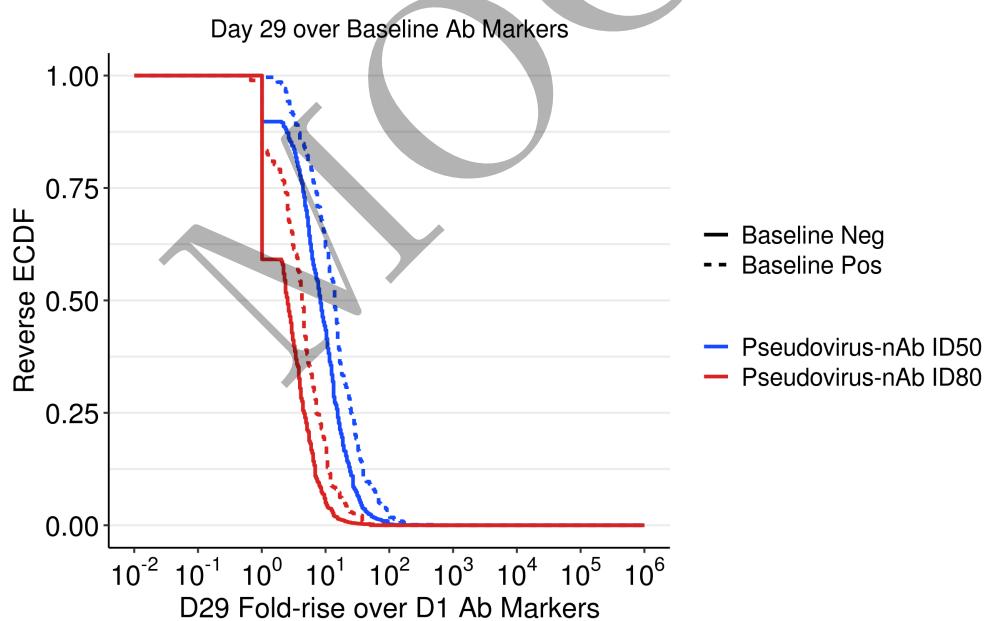


Figure 3.37: RCDF plots for D29 over D1 fold-rise nAb markers: by baseline status for the vaccine arm



Figure 3.38: RCDF plots for D57 fold-rise over D1 bAb markers: by baseline status for the vaccine arm

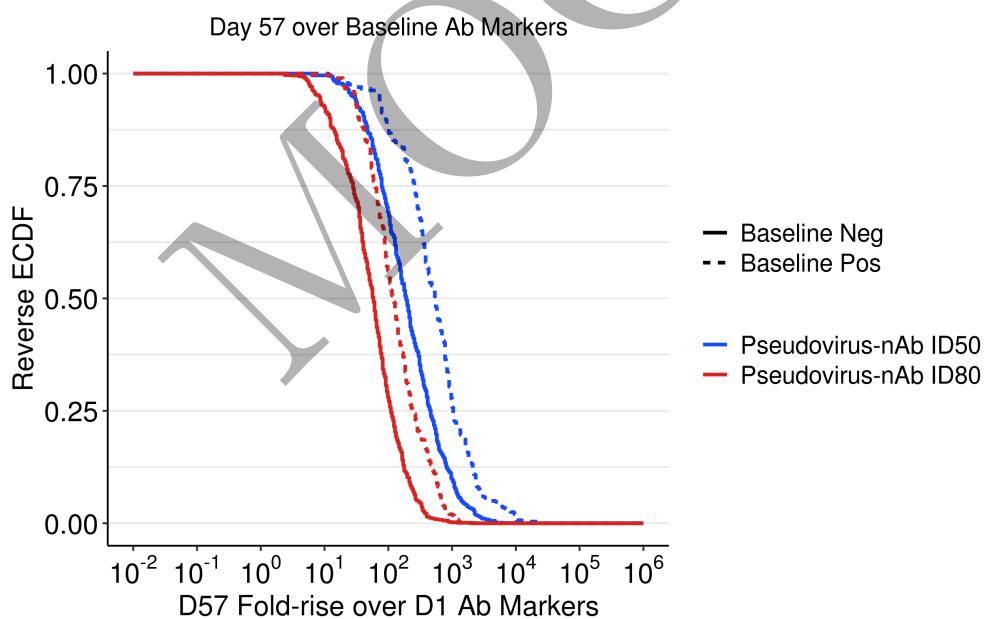


Figure 3.39: RCDF plots for D57 fold-rise over D1 nAb markers: by baseline status for the vaccine arm

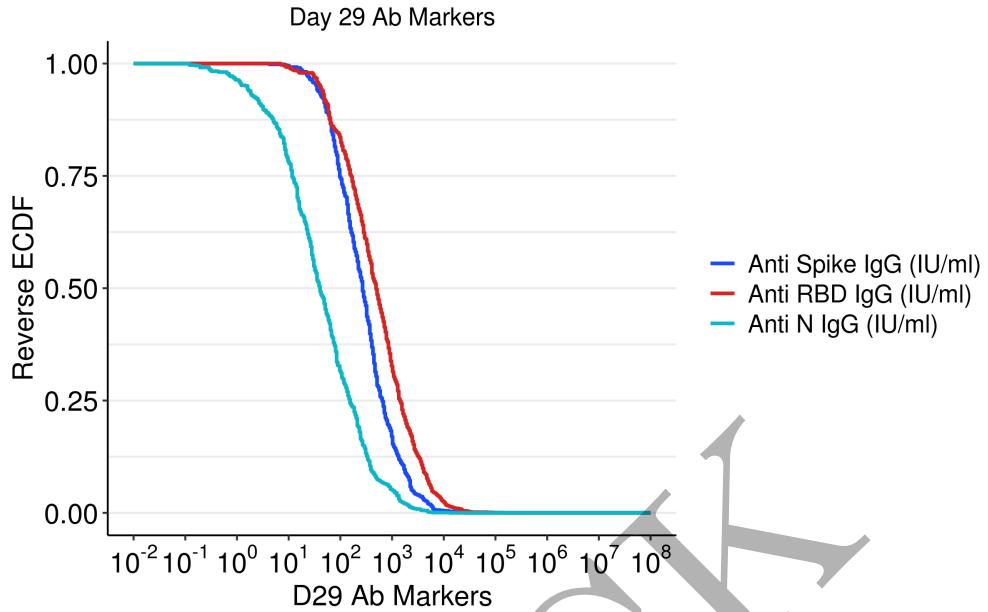


Figure 3.40: RCDF plots for D29 bAb markers: baseline negative vaccine arm

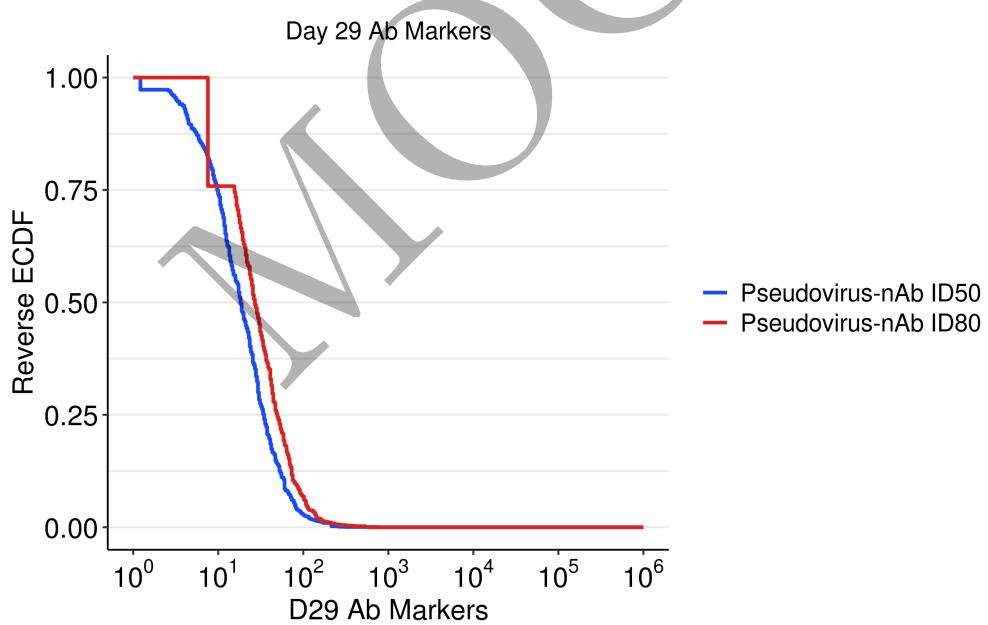


Figure 3.41: RCDF plots for D29 nAb markers: baseline negative vaccine arm

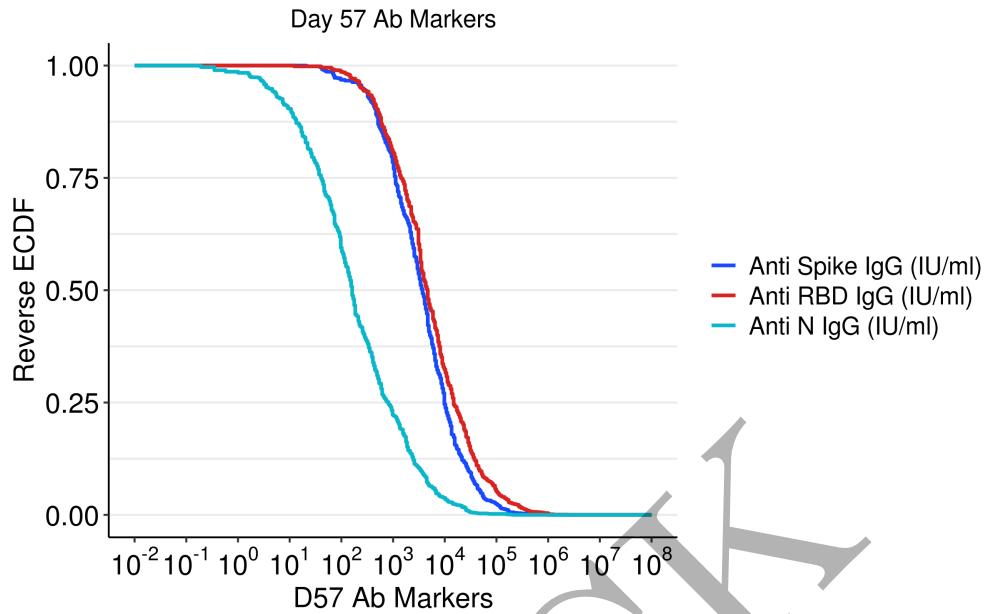


Figure 3.42: RCDF plots for D57 bAb markers: baseline negative vaccine arm

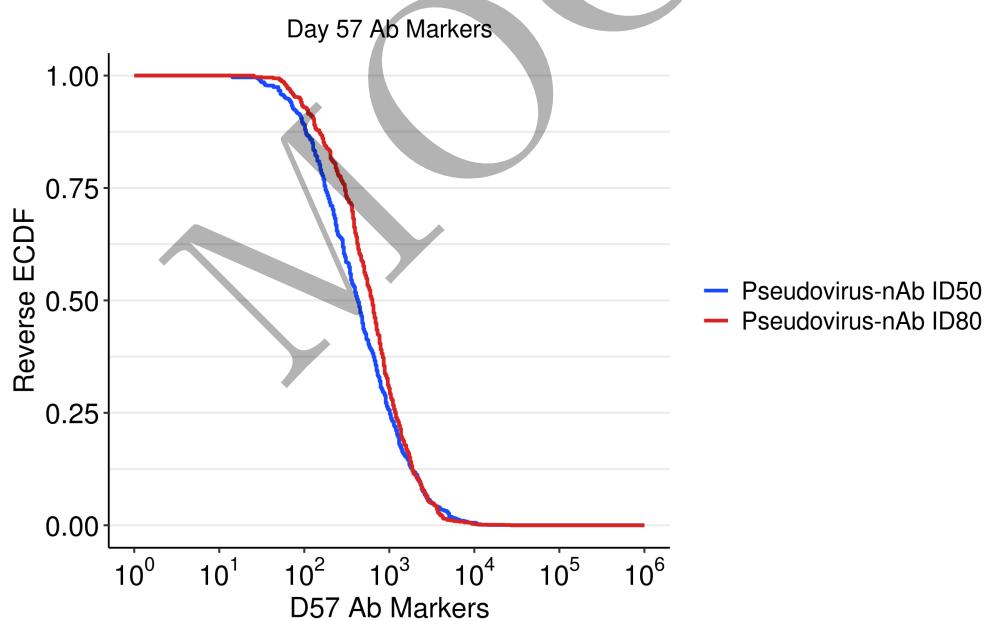


Figure 3.43: RCDF plots for D57 nAb markers: baseline negative vaccine arm



Figure 3.44: RCDF plots for D29 fold-rise over D1 bAb markers: baseline negative vaccine arm

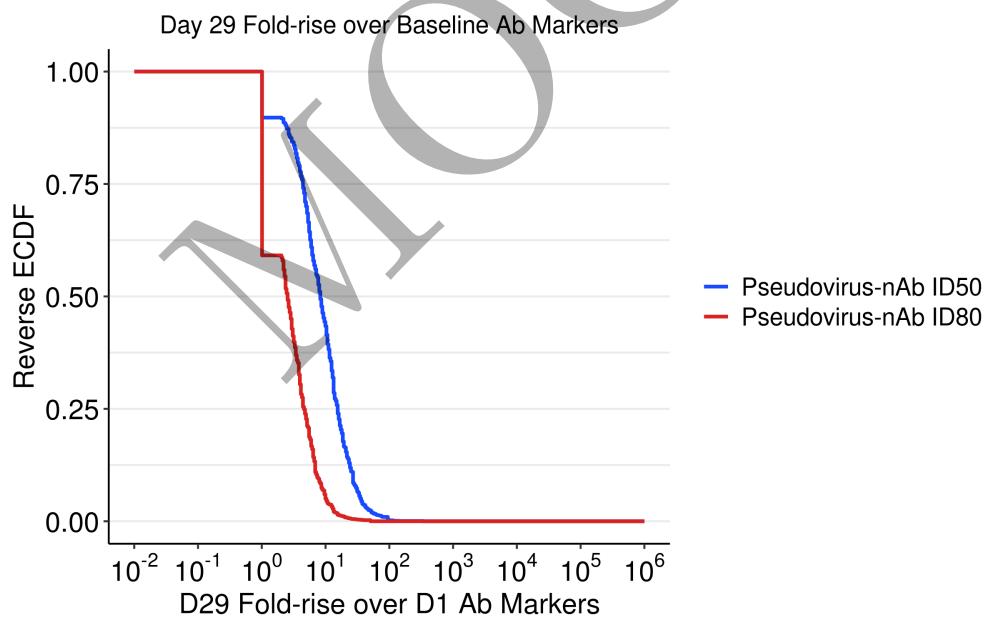


Figure 3.45: RCDF plots for D29 fold-rise over D1 nAb markers: baseline negative vaccine arm

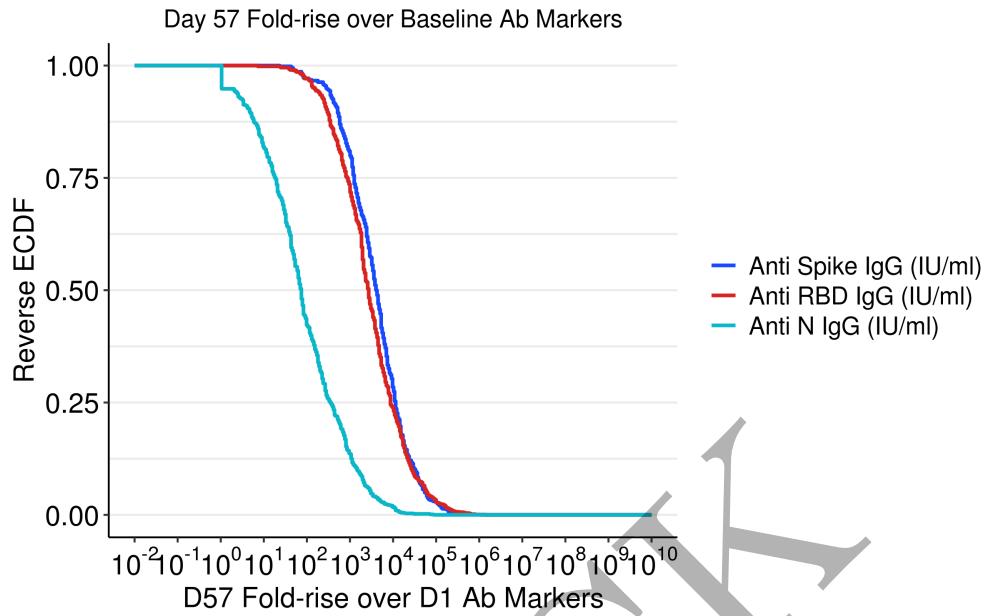


Figure 3.46: RCDF plots for D57 fold-rise over D1 bAb markers: baseline negative vaccine arm

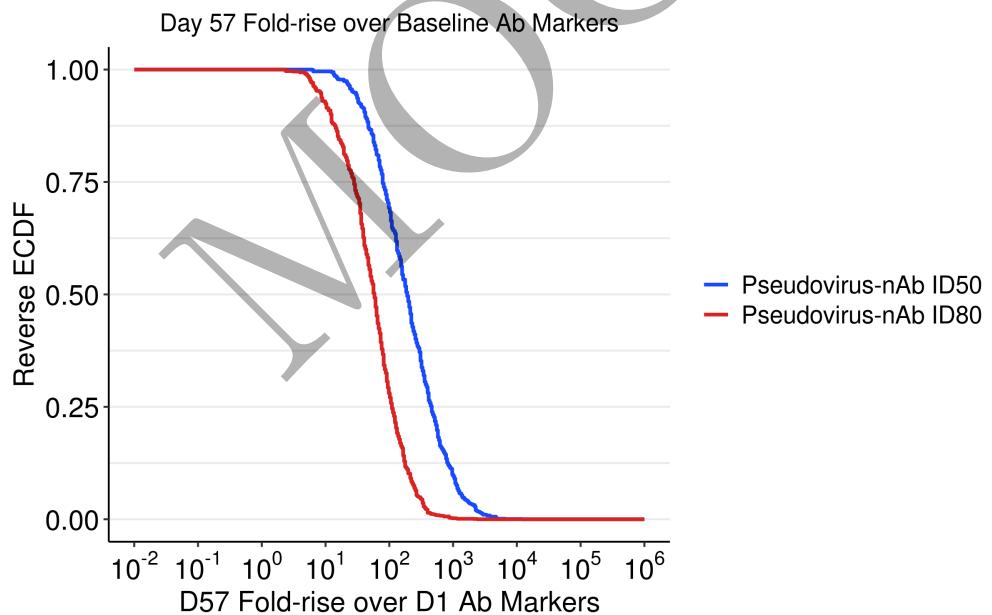


Figure 3.47: RCDF plots for D57 fold-rise over D1 nAb markers: baseline negative vaccine arm

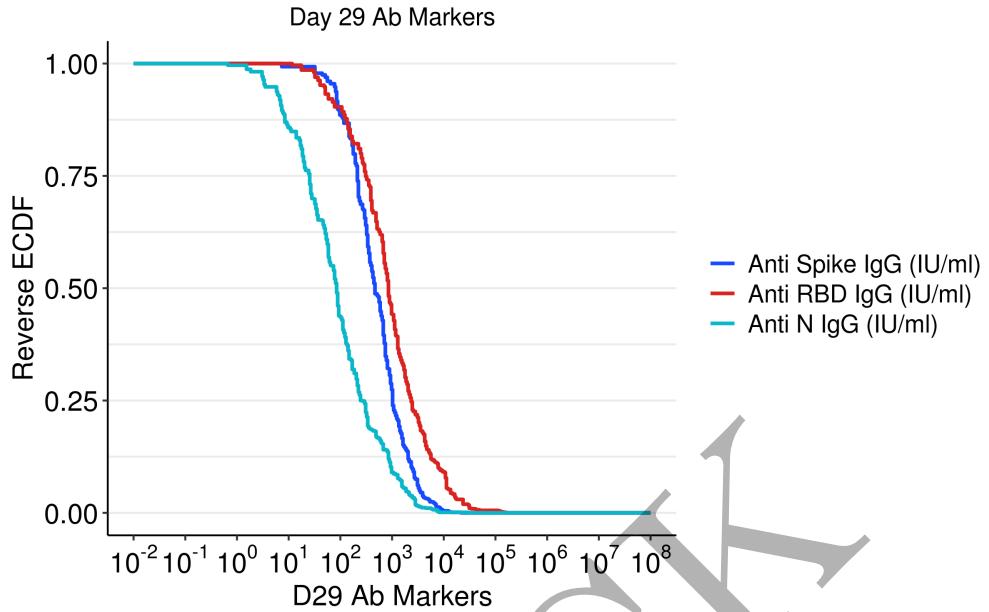


Figure 3.48: RCDF plots for D29 bAb markers: baseline positive vaccine arm

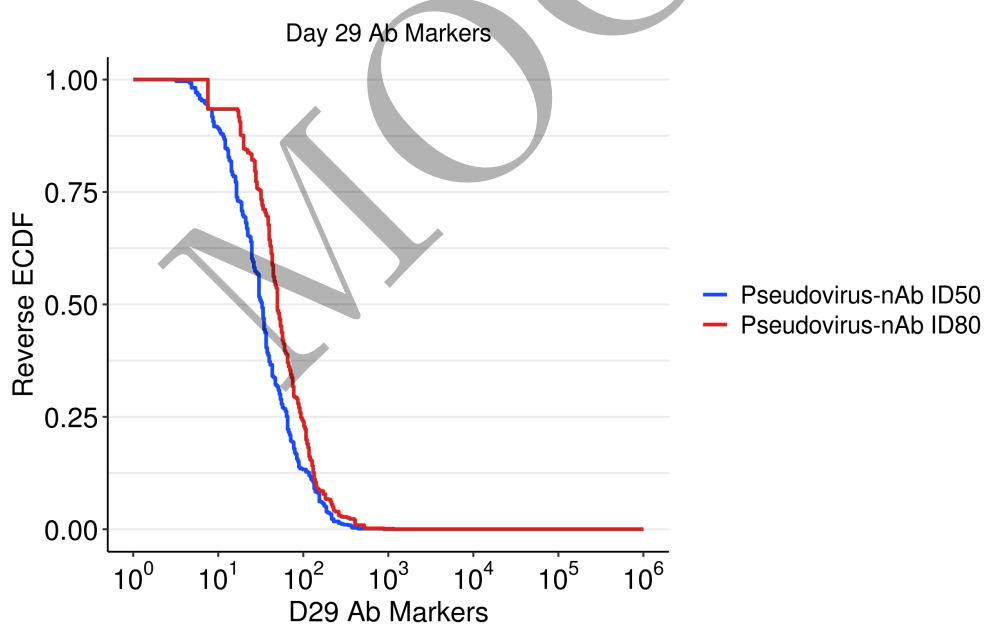


Figure 3.49: RCDF plots for D29 nAb markers: baseline positive vaccine arm

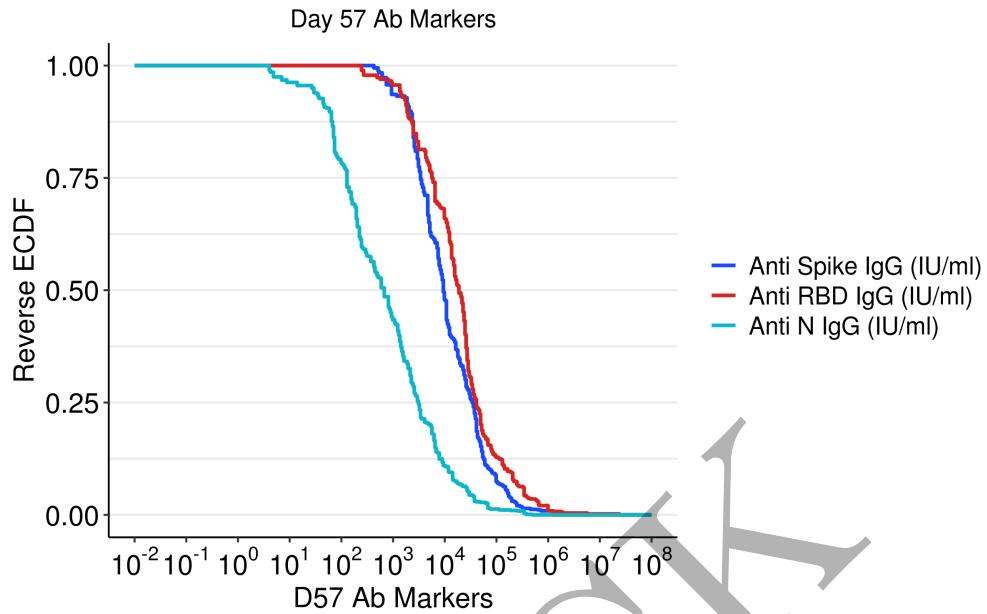


Figure 3.50: RCDF plots for D57 bAb markers: baseline positive vaccine arm

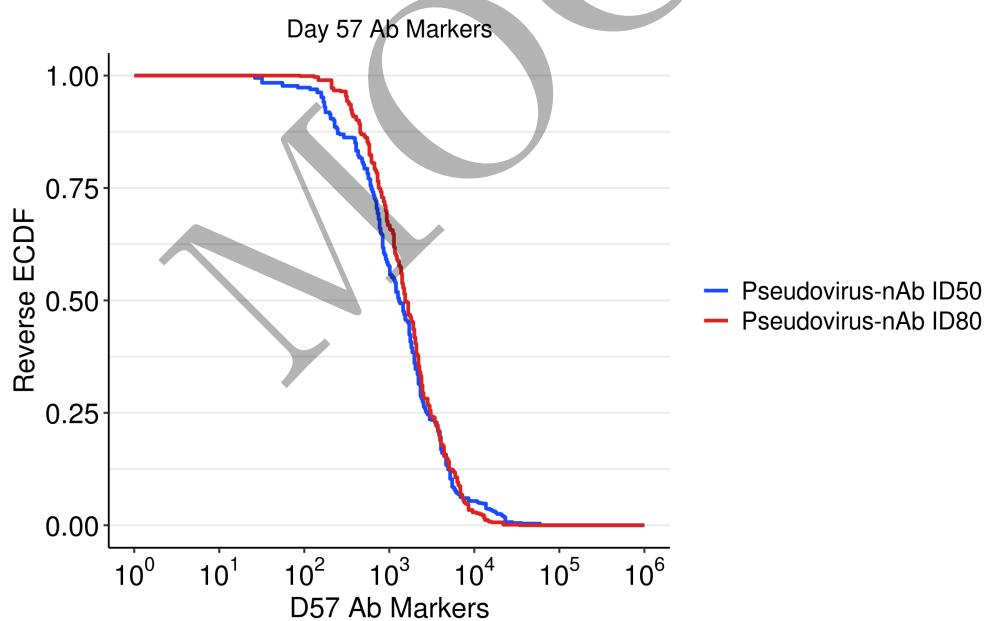


Figure 3.51: RCDF plots for D57 nAb markers: baseline positive vaccine arm



Figure 3.52: RCDF plots for D29 fold-rise over D1 bAb markers: baseline positive vaccine arm



Figure 3.53: RCDF plots for D29 fold-rise over D1 nAb markers: baseline positive vaccine arm



Figure 3.54: RCDF plots for D57 fold-rise over D1 bAb markers: baseline positive vaccine arm



Figure 3.55: RCDF plots for D57 fold-rise over D1 nAb markers: baseline positive vaccine arm

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

3.3.1 Baseline SARS-CoV-2 Negative



Figure 3.56: Scatter plots for D1 Ab markers vs. age: baseline negative vaccine arm



Figure 3.57: Scatter plots for D29 Ab markers vs. age: baseline negative vaccine arm

3.3. SCATTER PLOTS OF ANTIBODY MARKERS VERSUS AGE FOR OVERALL PER-PROTOCOL COHORT541



Figure 3.58: Scatter plots for D57 Ab markers vs. age: baseline negative vaccine arm

3.3.2 Baseline SARS-CoV-2 Positive

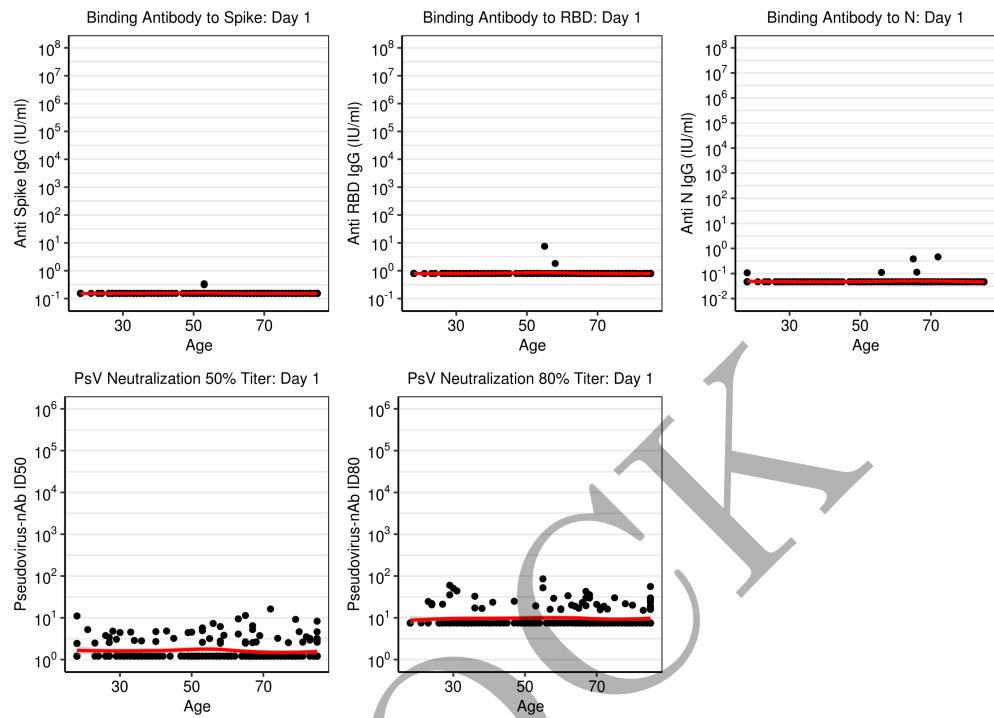


Figure 3.59: Scatter plots for D1 Ab markers vs. age: baseline positive vaccine arm

3.3. SCATTER PLOTS OF ANTIBODY MARKERS VERSUS AGE FOR OVERALL PER-PROTOCOL COHORT543



Figure 3.60: Scatter plots for D29 Ab markers vs. age: baseline positive vaccine arm



Figure 3.61: Scatter plots for D57 Ab markers vs. age: baseline positive vaccine arm

3.3.3 Baseline SARS-CoV-2 Positive Placebo Arm



Figure 3.62: Scatter plots for D1 Ab markers vs. age: baseline positive placebo arm



Figure 3.63: Scatter plots for D29 Ab markers vs. age: baseline positive placebo arm

3.3. SCATTER PLOTS OF ANTIBODY MARKERS VERSUS AGE FOR OVERALL PER-PROTOCOL COHORT547



Figure 3.64: Scatter plots for D57 Ab markers vs. age: baseline positive placebo arm

3.3.4 Baseline SARS-CoV-2 Negative Placebo Arm



Figure 3.65: Scatter plots for D1 Ab markers vs. age: baseline negative placebo arm

3.3. SCATTER PLOTS OF ANTIBODY MARKERS VERSUS AGE FOR OVERALL PER-PROTOCOL COHORT549



Figure 3.66: Scatter plots for D29 Ab markers vs. age: baseline negative placebo arm



Figure 3.67: Scatter plots for D57 Ab markers vs. age: baseline negative placebo arm

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

3.4.1 Baseline SARS-CoV-2 Negative



Figure 3.68: Boxplots of D1 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

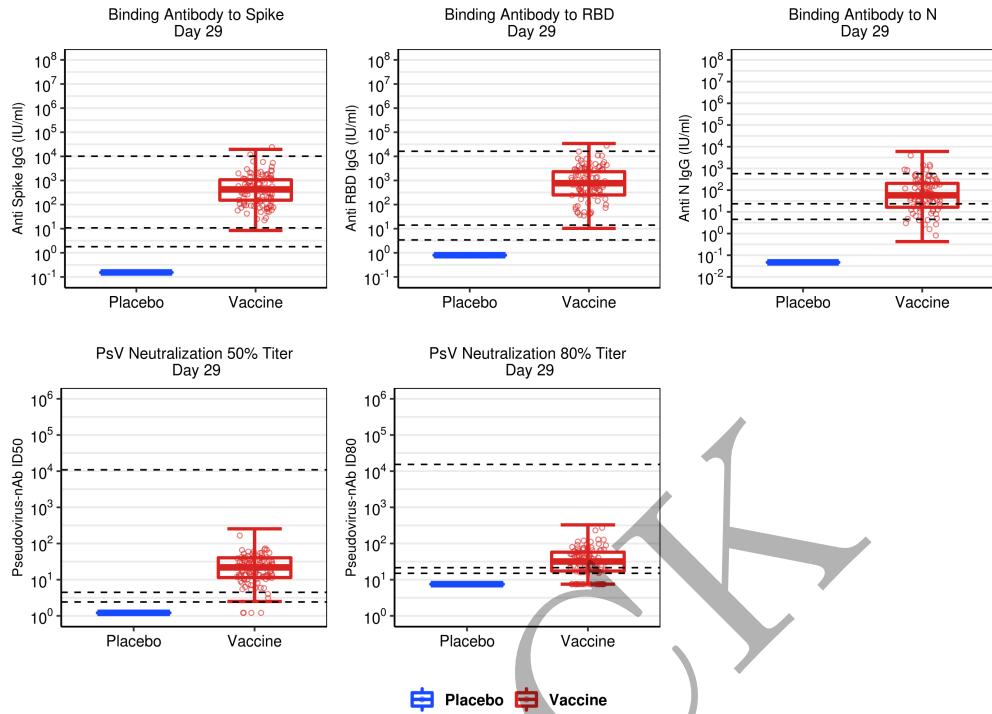


Figure 3.69: Boxplots of D29 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.70: Boxplots of D57 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.71: Boxplots of D29 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms



Figure 3.72: Boxplots of D57 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

3.4.2 Baseline SARS-CoV-2 Positive



Figure 3.73: Boxplots of D1 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.74: Boxplots of D29 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.75: Boxplots of D57 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.76: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms



Figure 3.77: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms

3.4.3 Baseline negative vs. positive vaccine recipients



Figure 3.78: Boxplots of D1 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

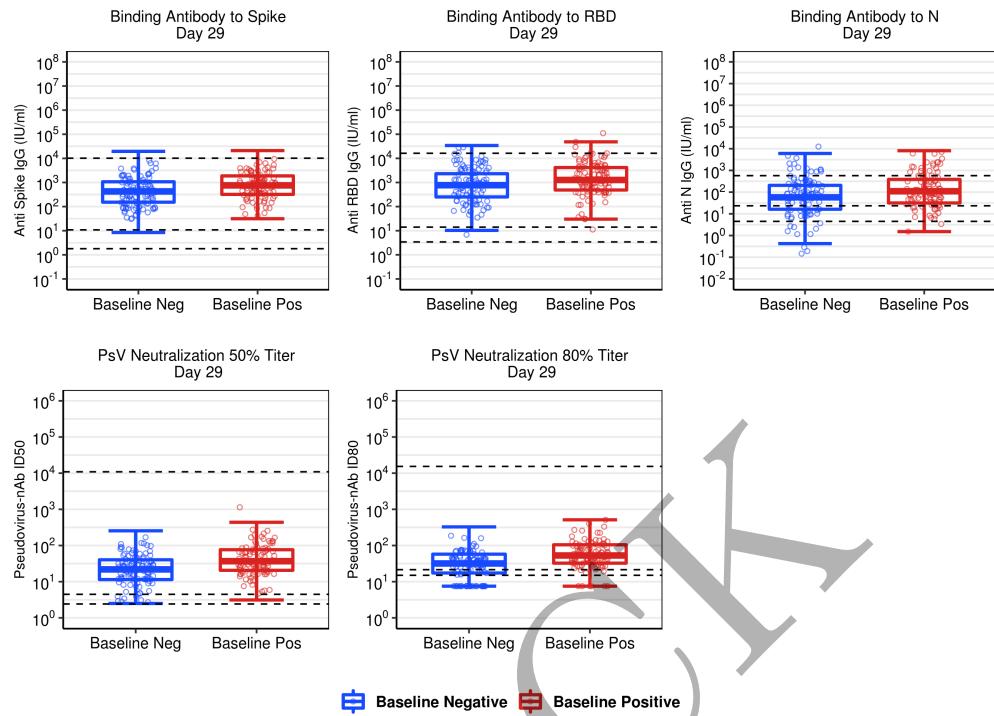


Figure 3.79: Boxplots of D29 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.80: Boxplots of D57 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.81: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm



Figure 3.82: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm

3.4.4 Baseline negative vs. positive placebo recipients

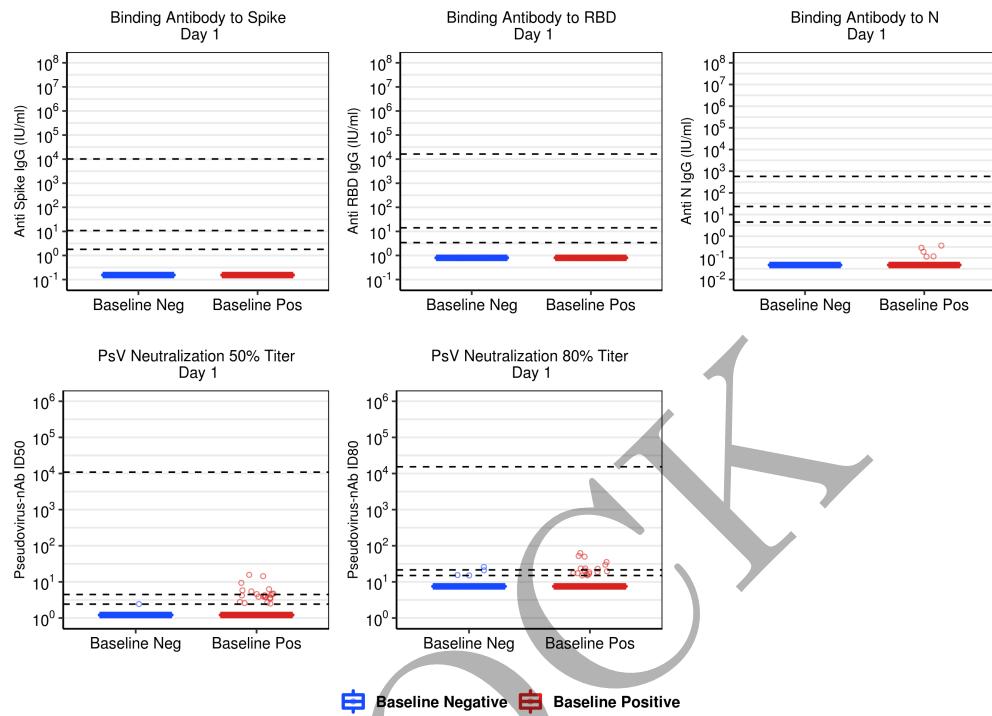


Figure 3.83: Boxplots of D1 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.84: Boxplots of D29 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.85: Boxplots of D57 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.86: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative placebo arm



Figure 3.87: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

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

3.5.1 Baseline SARS-CoV-2 Negative



Figure 3.88: Spaghetti plots of Ab markers over time: baseline negative vaccine + placebo arm

3.5.2 Baseline SARS-CoV-2 Positive



Figure 3.89: Spaghetti plots of Ab markers over time: baseline positive vaccine + placebo arm

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

3.6.1 Baseline SARS-CoV-2 Negative



Figure 3.90: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age groups.

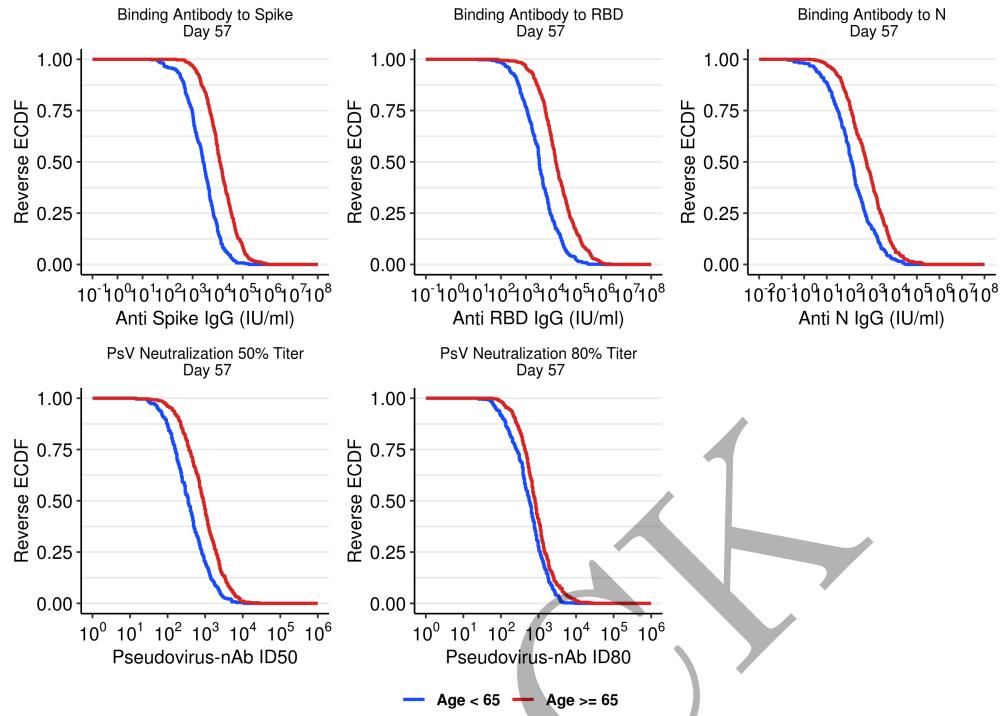


Figure 3.91: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age groups.

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

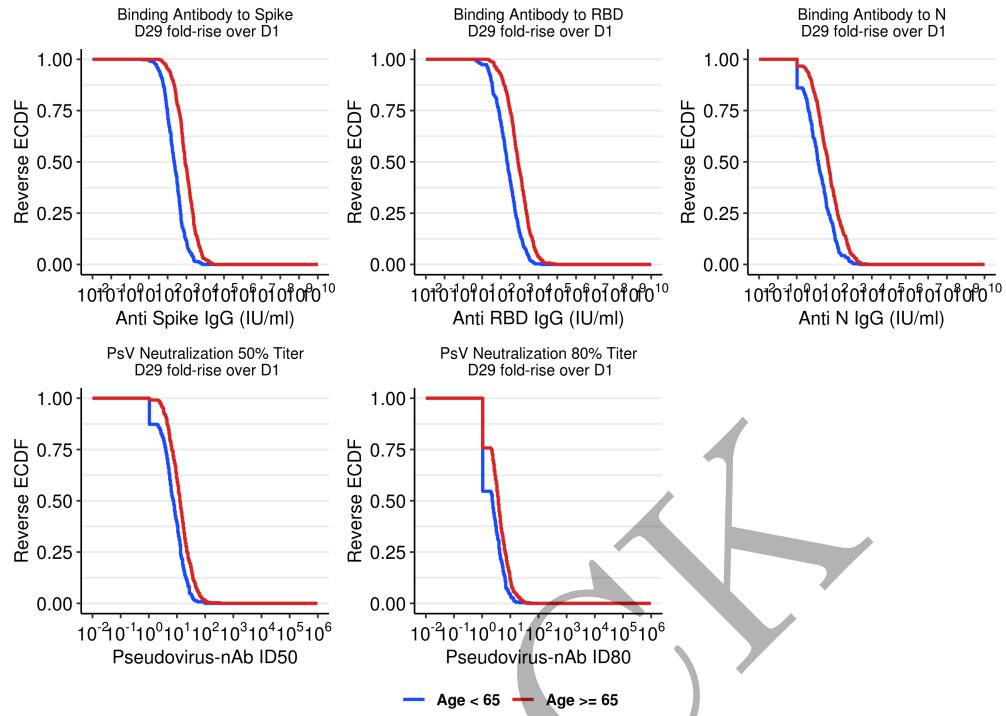


Figure 3.92: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

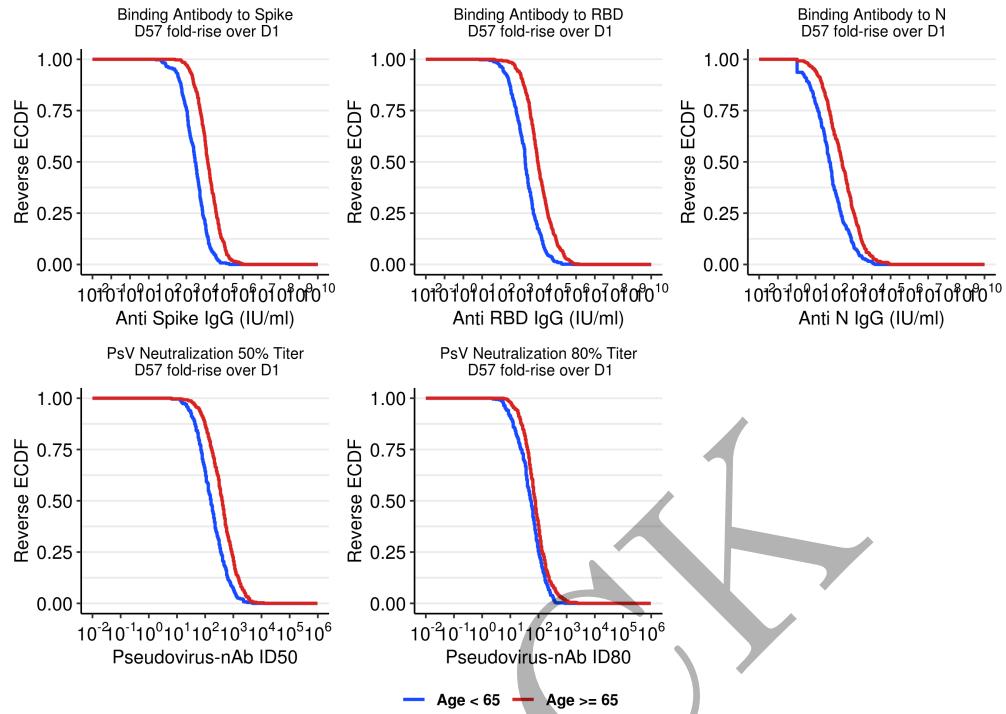


Figure 3.93: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

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



Figure 3.94: RCDF plots for D29 Ab markers: baseline negative vaccine arm by high-risk condition.



Figure 3.95: RCDF plots for D57 Ab markers: baseline negative vaccine arm by high-risk condition.

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



Figure 3.96: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.



Figure 3.97: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

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

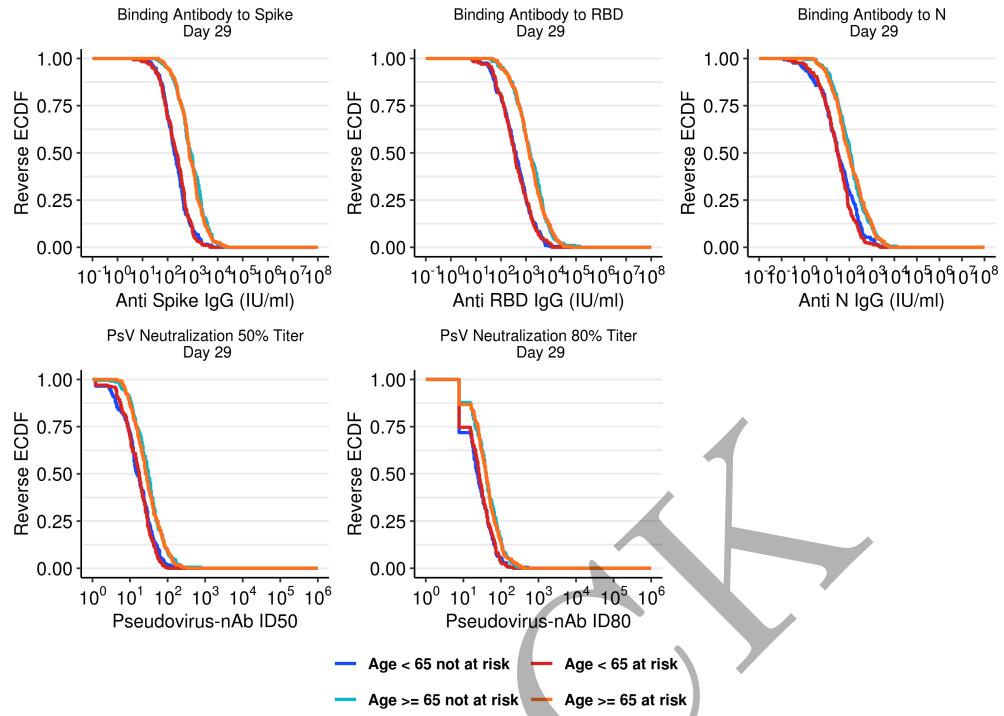


Figure 3.98: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and high-risk condition.



Figure 3.99: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and high-risk condition.

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



Figure 3.100: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.



Figure 3.101: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.

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



Figure 3.102: RCDF plots for D29 Ab markers: baseline negative vaccine arm by sex assigned at birth.



Figure 3.103: RCDF plots for D57 Ab markers: baseline negative vaccine arm by sex assigned at birth.

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



Figure 3.104: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.



Figure 3.105: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

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



Figure 3.106: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

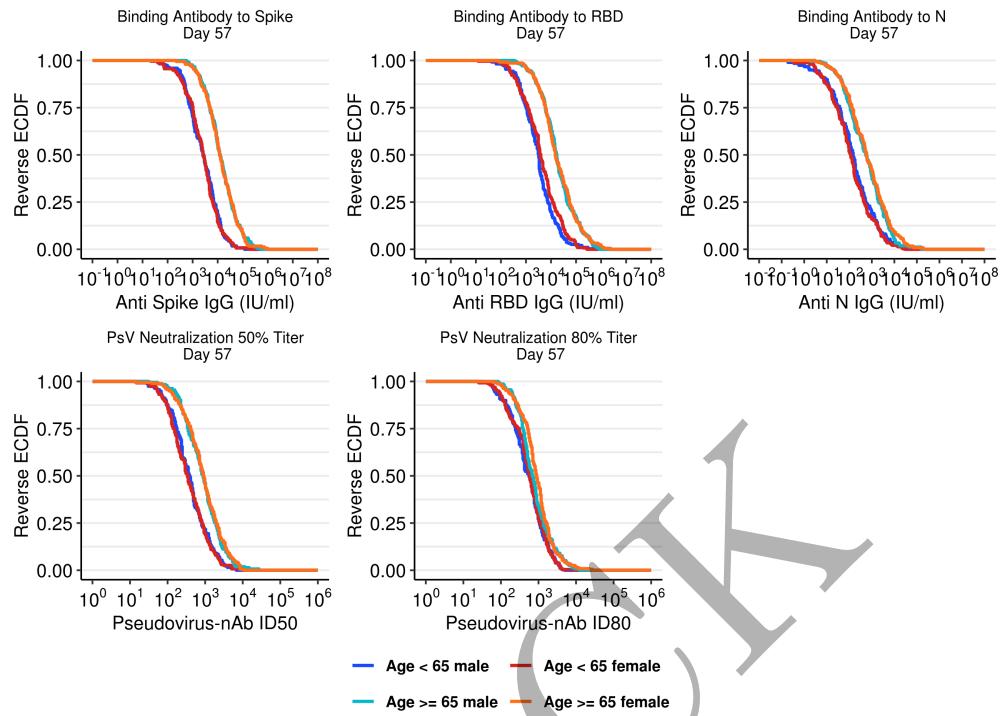


Figure 3.107: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

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



Figure 3.108: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.



Figure 3.109: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex at birth.

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



Figure 3.110: RCDF plots for D29 Ab markers: baseline negative vaccine arm by ethnicity.



Figure 3.111: RCDF plots for D57 Ab markers: baseline negative vaccine arm by ethnicity.

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



Figure 3.112: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.



Figure 3.113: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

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



Figure 3.114: RCDF plots for D29 Ab markers: baseline negative vaccine arm by race.



Figure 3.115: RCDF plots for D57 Ab markers: baseline negative vaccine arm by race.

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



Figure 3.116: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.



Figure 3.117: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

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



Figure 3.118: RCDF plots for D29 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.



Figure 3.119: RCDF plots for D57 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

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



Figure 3.120: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

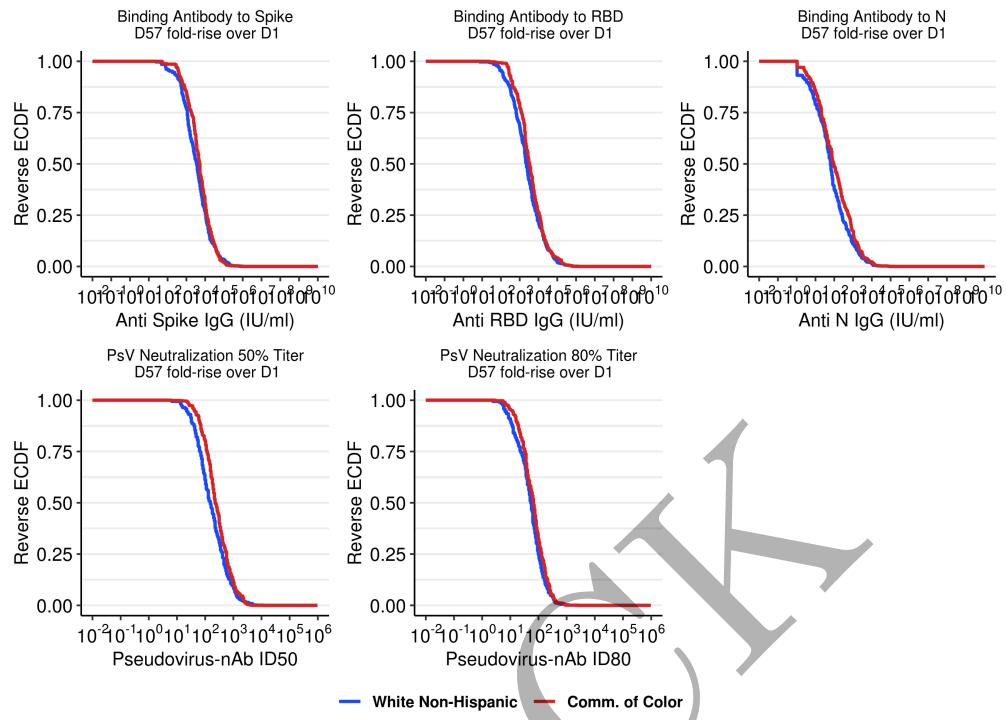


Figure 3.121: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

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



Figure 3.122: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

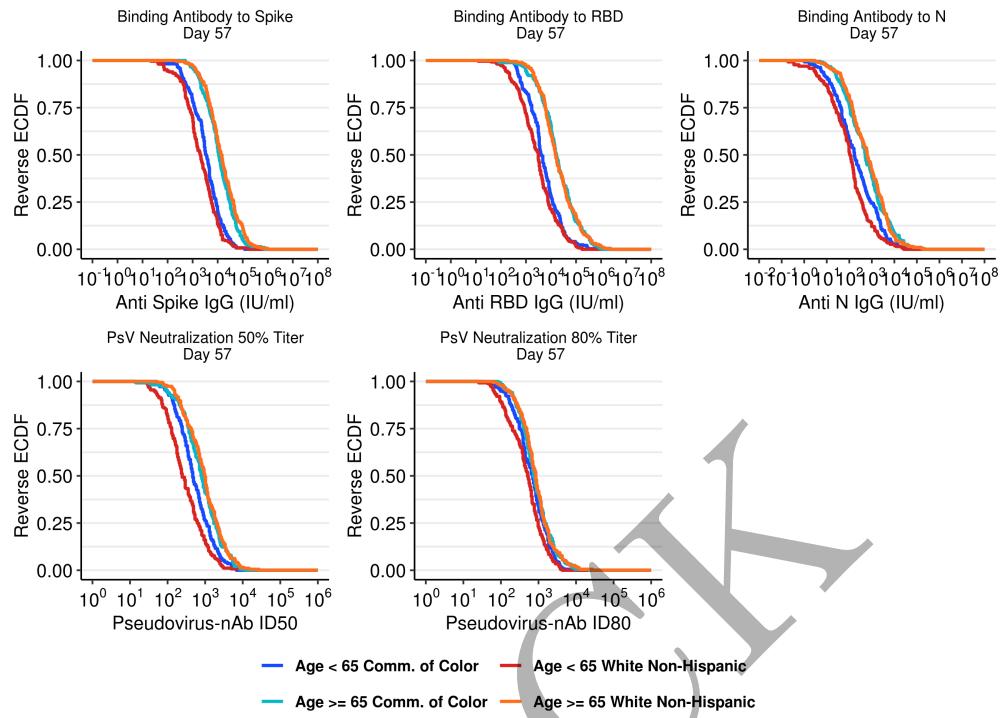


Figure 3.123: RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT607



Figure 3.124: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.



Figure 3.125: RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT609

3.6.2 Baseline SARS-CoV-2 Positive

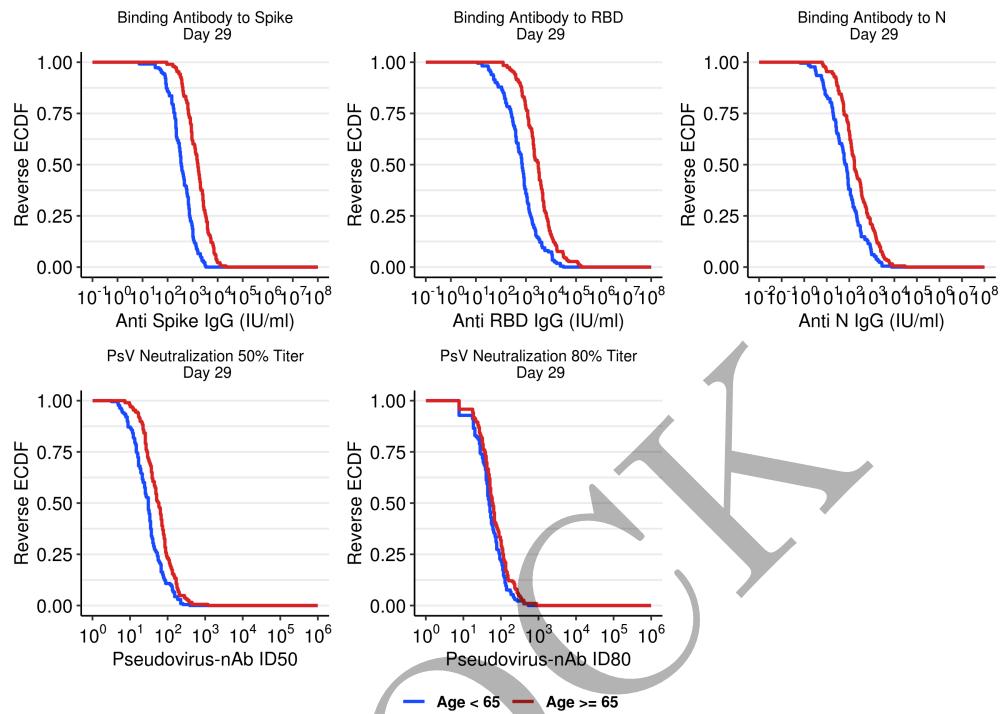


Figure 3.126: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age groups.

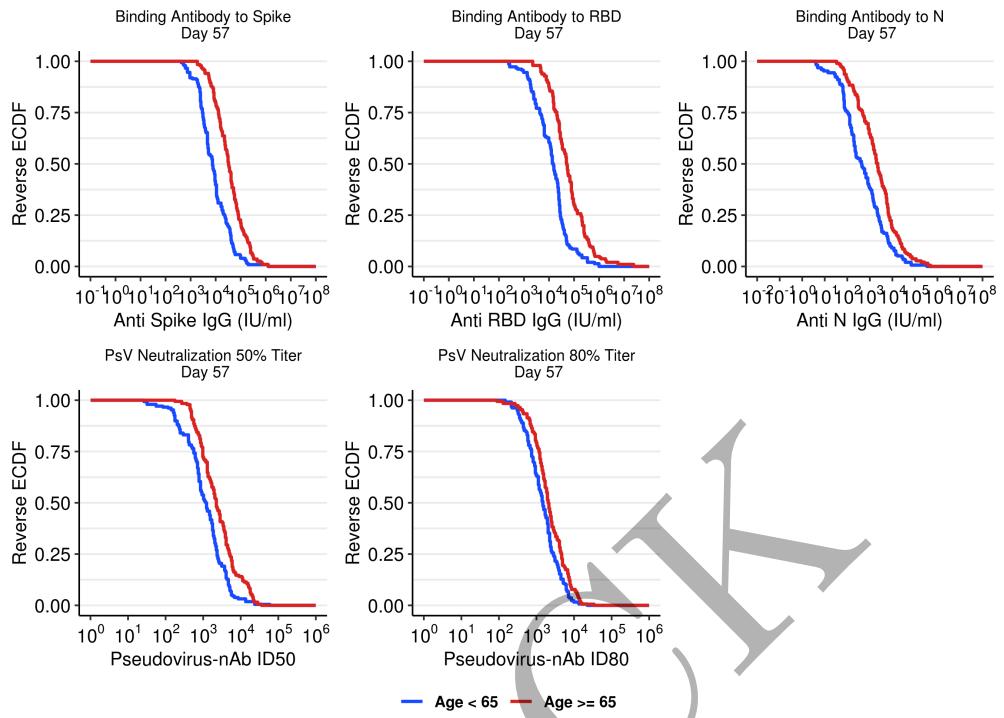


Figure 3.127: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age groups.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT611



Figure 3.128: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.



Figure 3.129: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT613



Figure 3.130: RCDF plots for D29 Ab markers: baseline positive vaccine arm by high-risk condition.

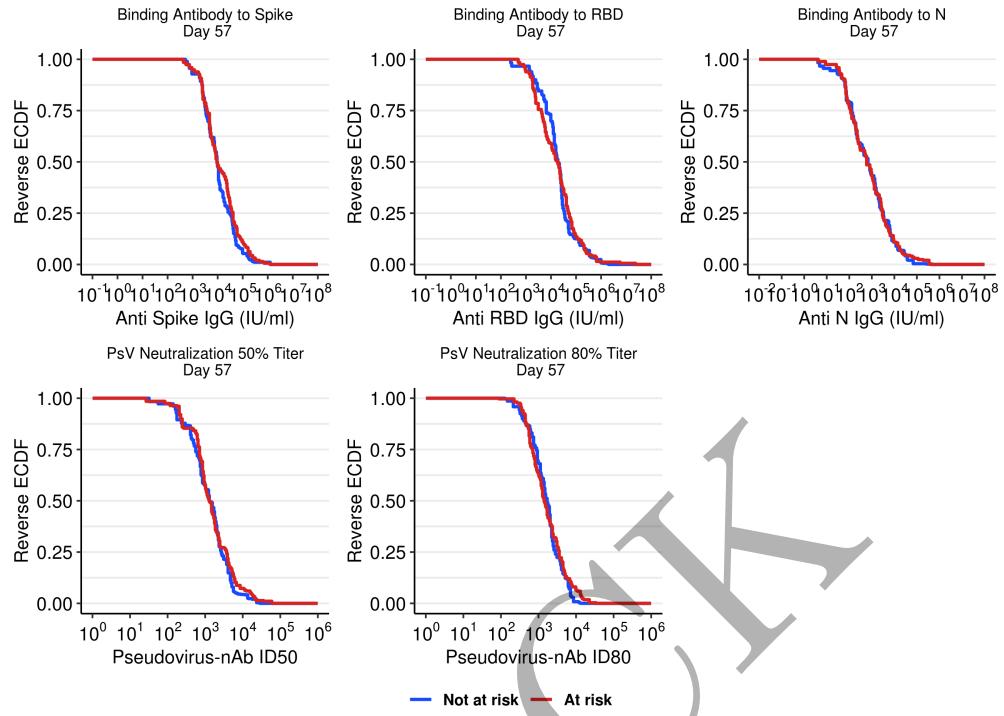


Figure 3.131: RCDF plots for D57 Ab markers: baseline positive vaccine arm by high-risk condition.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT615



Figure 3.132: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

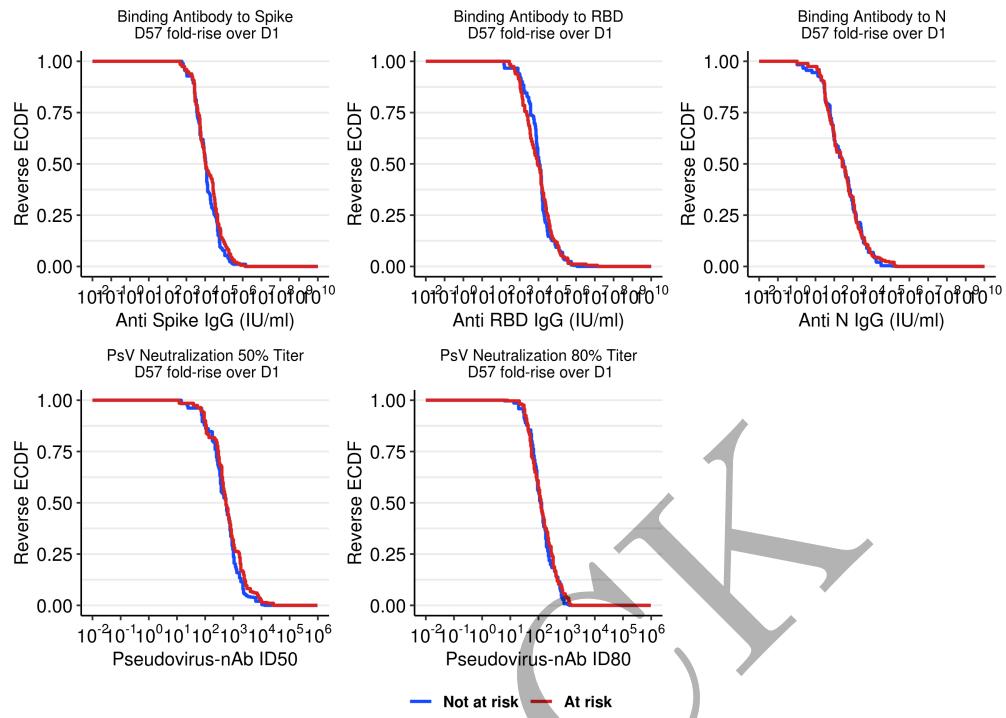


Figure 3.133: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT617



Figure 3.134: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and high-risk condition.



Figure 3.135: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and high-risk condition.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT619



Figure 3.136: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.



Figure 3.137: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT621



Figure 3.138: RCDF plots for D29 Ab markers: baseline positive vaccine arm by sex assigned at birth.



Figure 3.139: RCDF plots for D57 Ab markers: baseline positive vaccine arm by sex assigned at birth.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT623



Figure 3.140: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.



Figure 3.141: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT625



Figure 3.142: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.



Figure 3.143: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT627



Figure 3.144: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.



Figure 3.145: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT629



Figure 3.146: RCDF plots for D29 Ab markers: baseline positive vaccine arm by ethnicity.

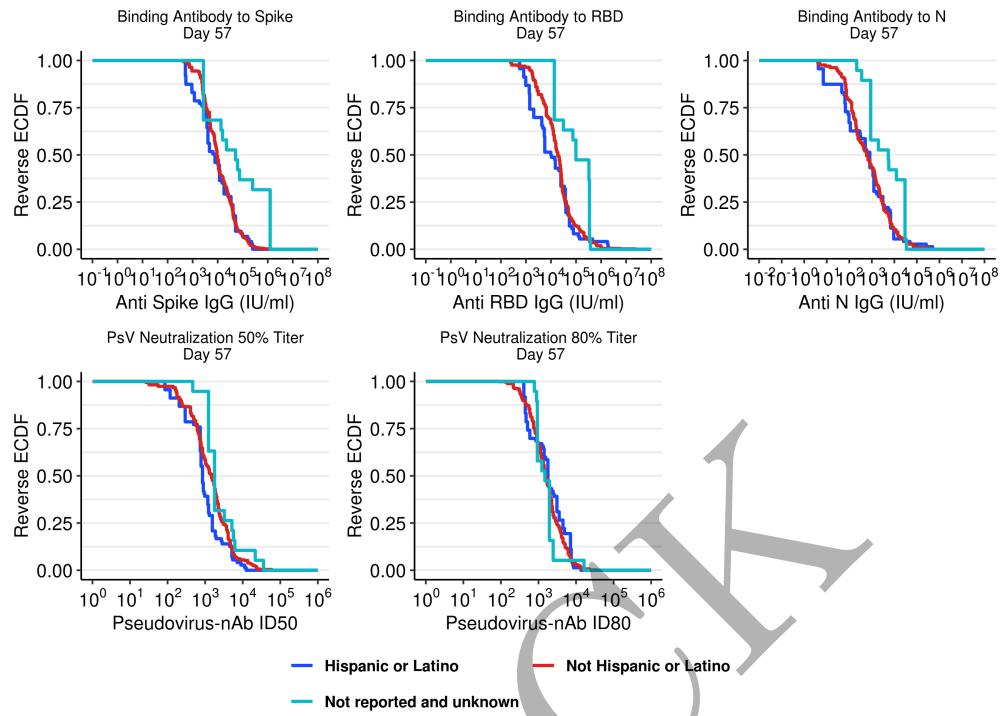


Figure 3.147: RCDF plots for D57 Ab markers: baseline positive vaccine arm by ethnicity.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT631



Figure 3.148: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.



Figure 3.149: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT633

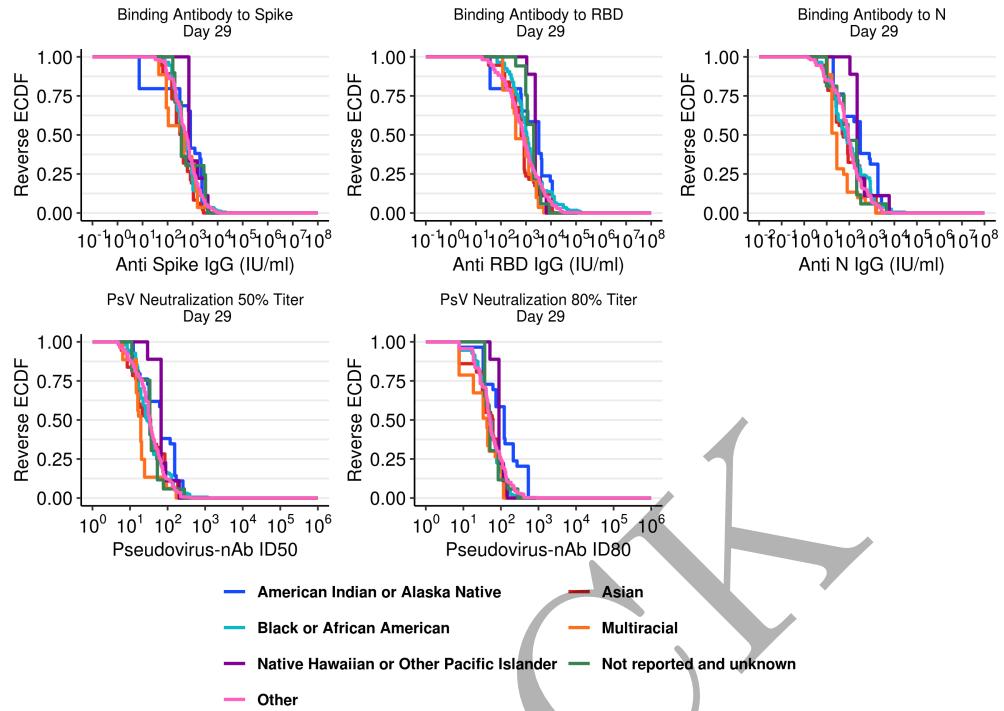


Figure 3.150: RCDF plots for D29 Ab markers: baseline positive vaccine arm by race.



Figure 3.151: RCDF plots for D57 Ab markers: baseline positive vaccine arm by race.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT635



Figure 3.152: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.



Figure 3.153: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT637



Figure 3.154: RCDF plots for D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.



Figure 3.155: RCDF plots for D57 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT639

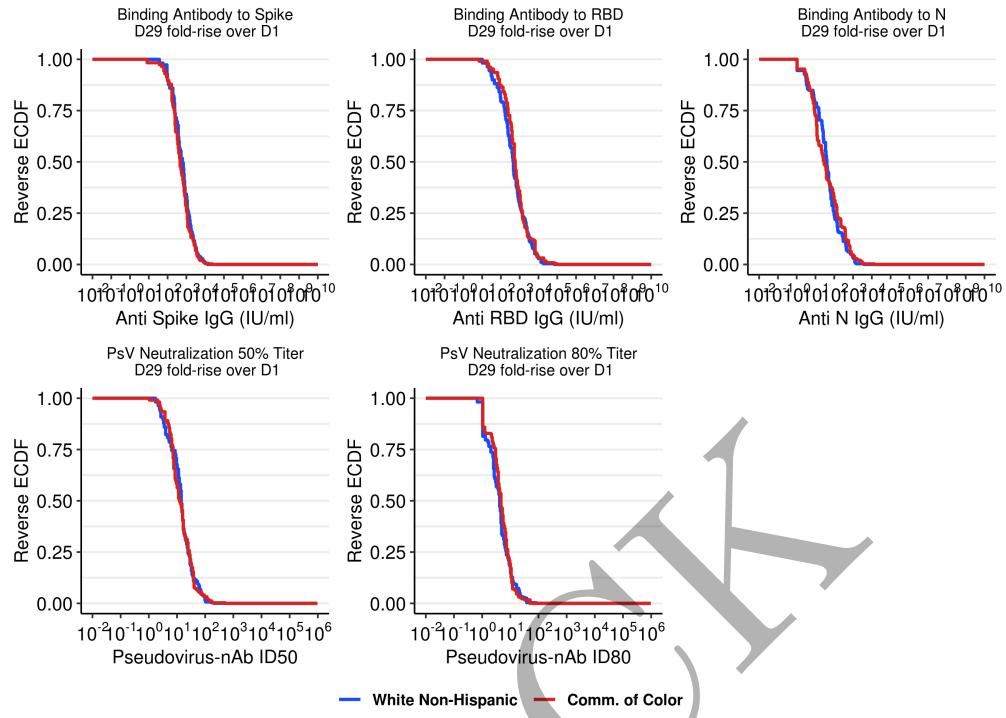


Figure 3.156: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

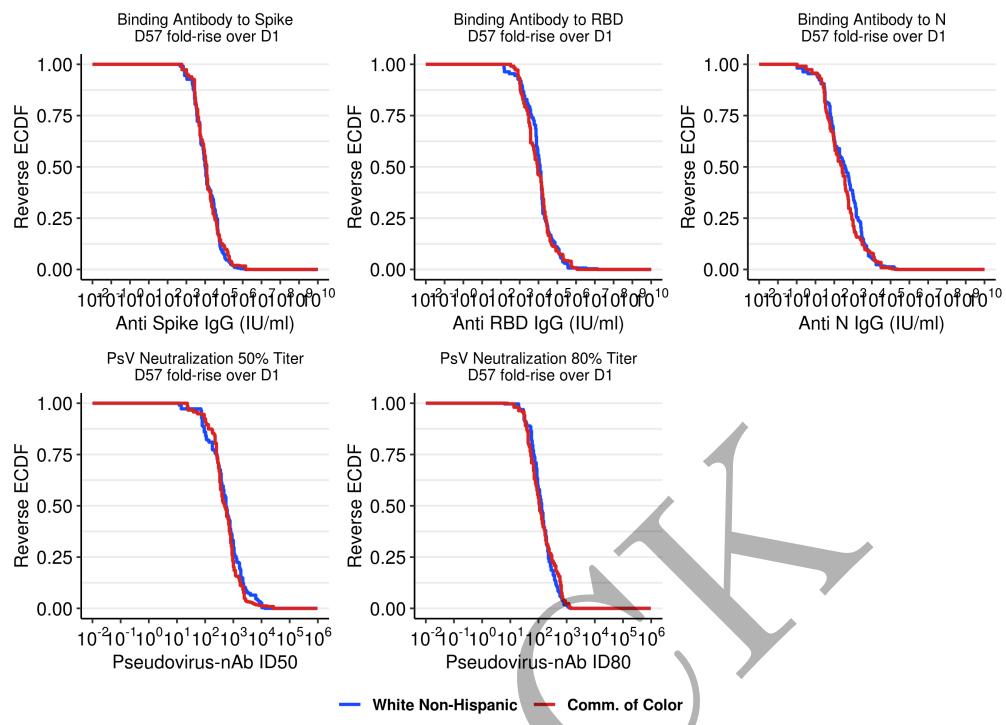


Figure 3.157: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT641

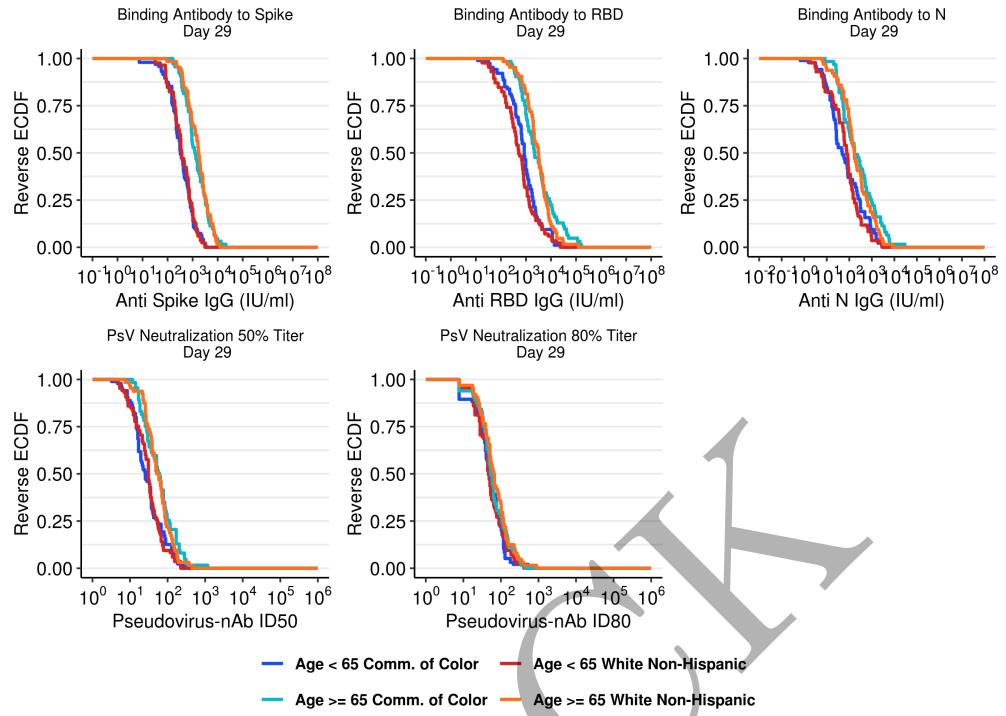


Figure 3.158: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.



Figure 3.159: RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT643



Figure 3.160: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.



Figure 3.161: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

3.6.3 Baseline SARS-CoV-2 Positive Placebo Arm



Figure 3.162: RCDF plots for D29 Ab markers: baseline positive placebo arm by age groups.

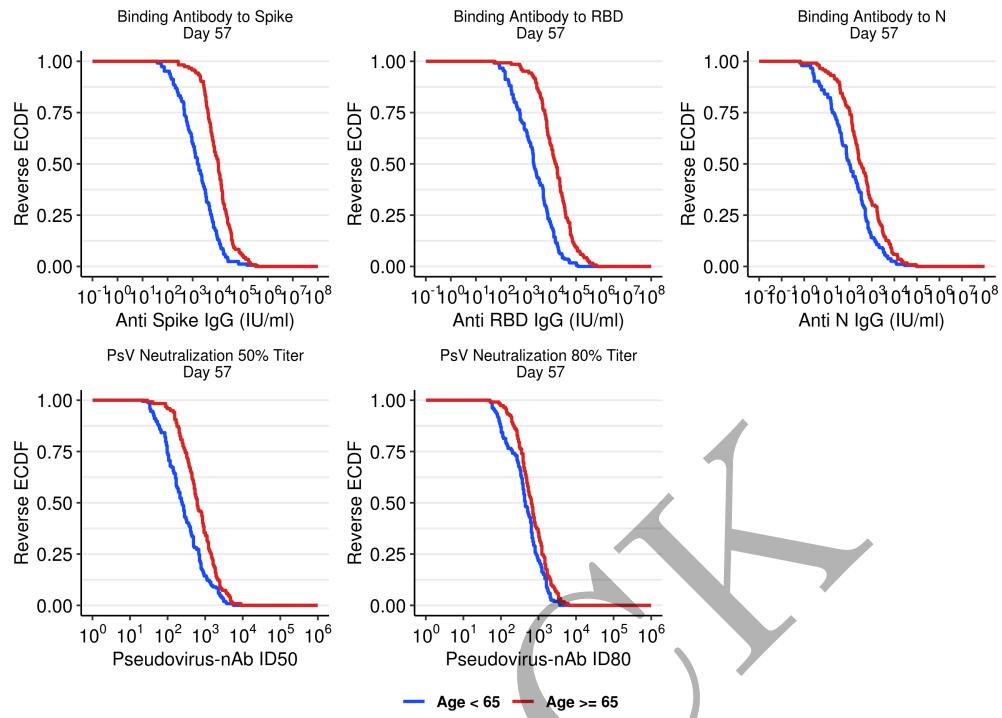


Figure 3.163: RCDF plots for D57 Ab markers: baseline positive placebo arm by age groups.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT647



Figure 3.164: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age groups.



Figure 3.165: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by age groups.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT649

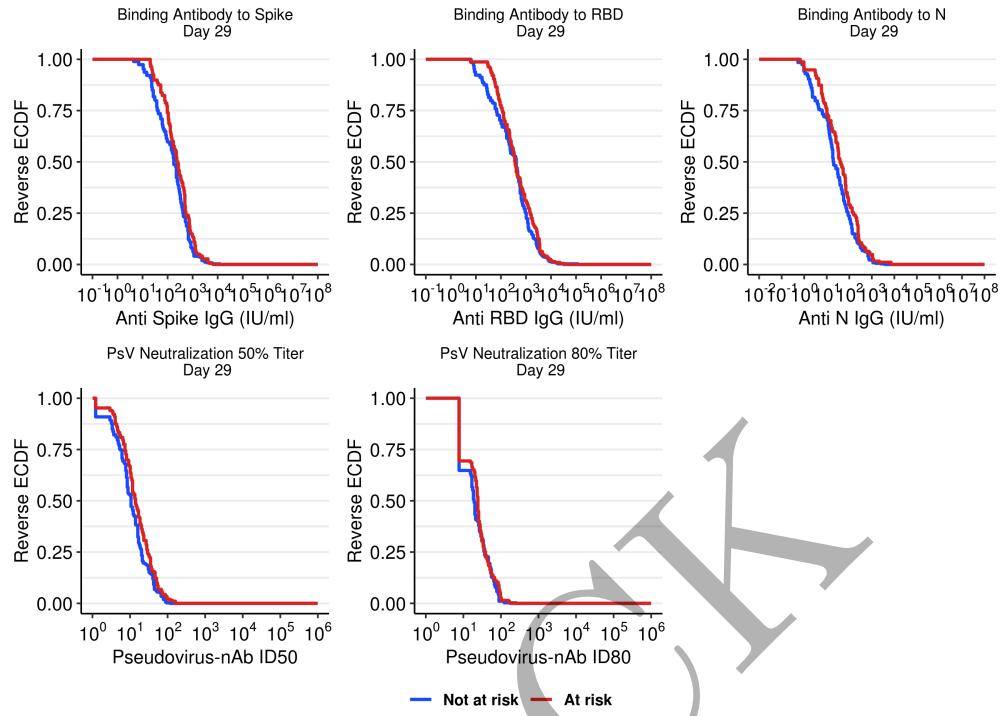


Figure 3.166: RCDF plots for D29 Ab markers: baseline positive placebo arm by high-risk condition.

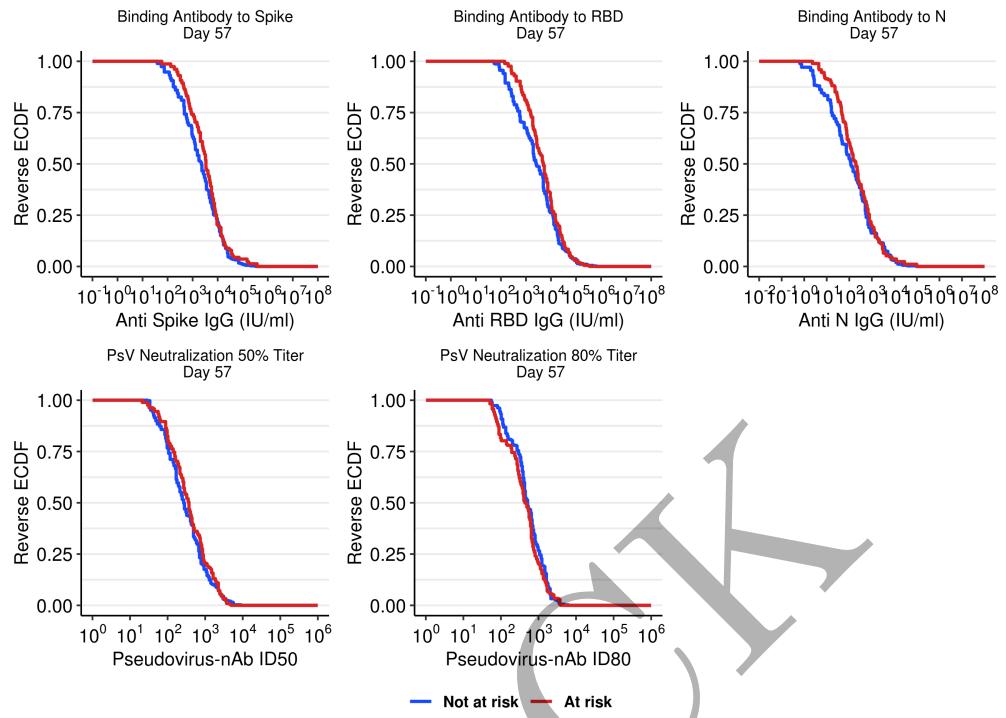


Figure 3.167: RCDF plots for D57 Ab markers: baseline positive placebo arm by high-risk condition.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT651



Figure 3.168: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by high-risk condition.

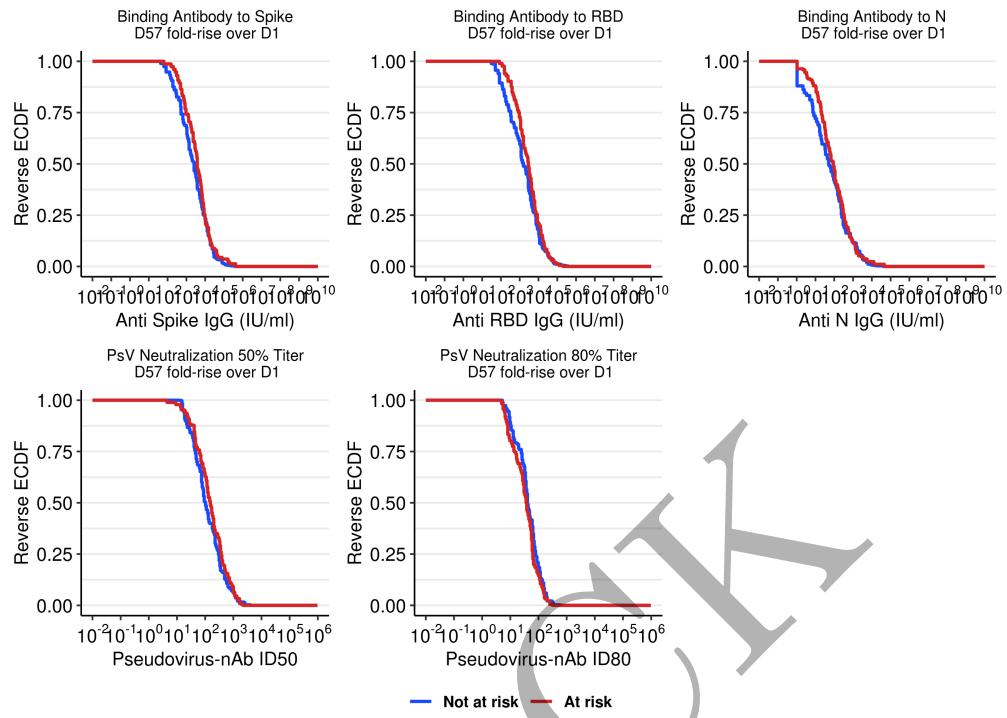


Figure 3.169: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by high-risk condition.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT653

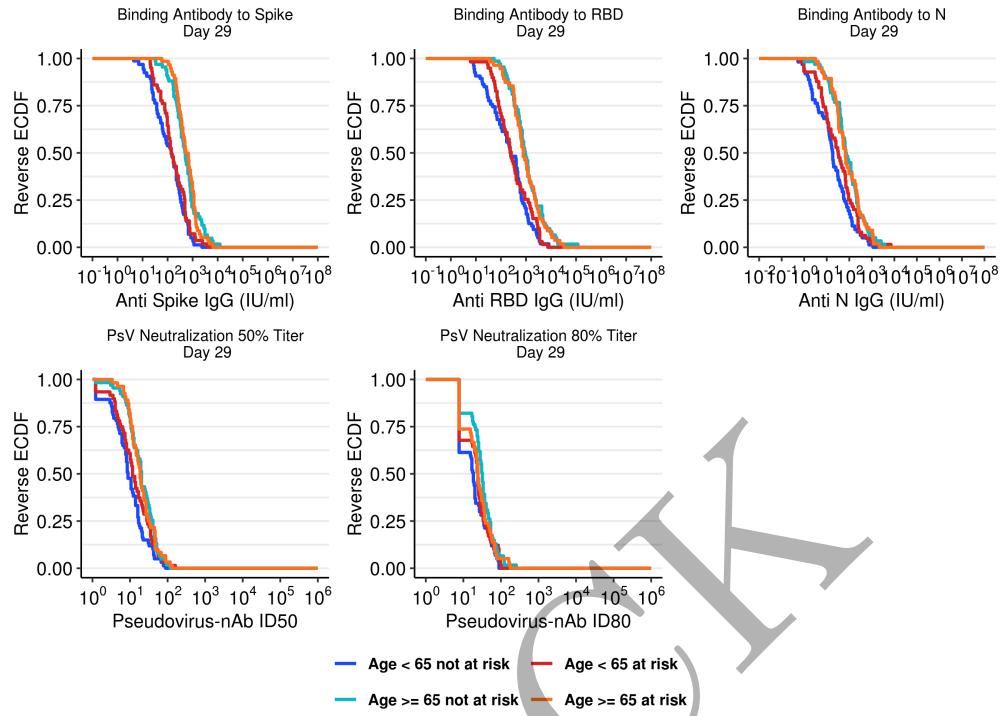


Figure 3.170: RCDF plots for D29 Ab markers: baseline positive placebo arm by age and high-risk condition.



Figure 3.171: RCDF plots for D57 Ab markers: baseline positive placebo arm by age and high-risk condition.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT655



Figure 3.172: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age and high-risk condition.



Figure 3.173: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by age and high-risk condition.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT657

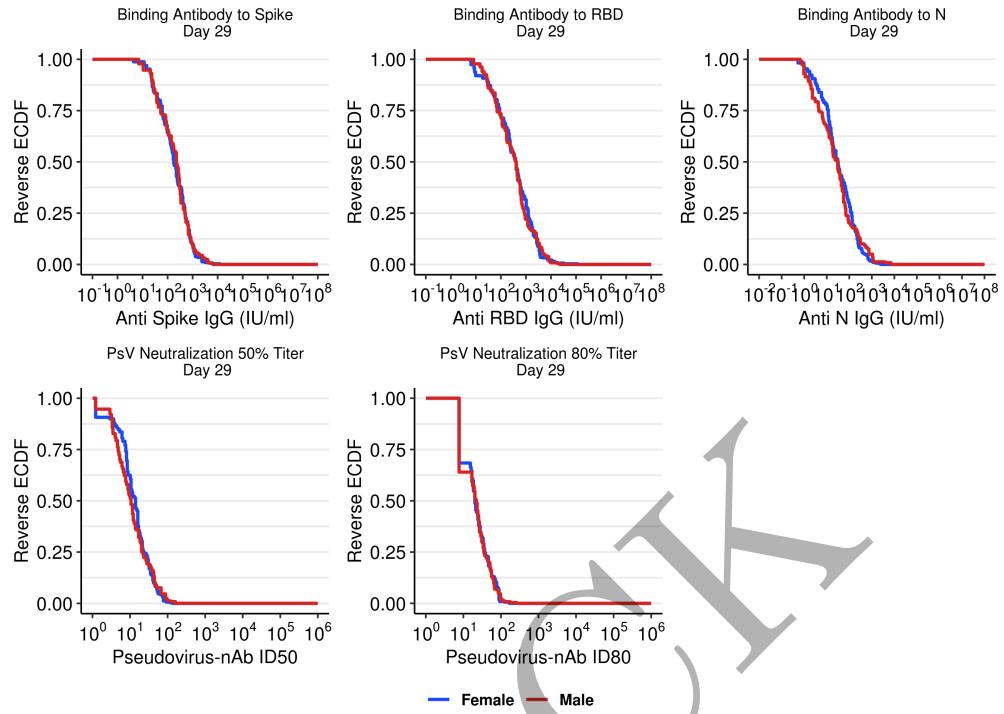


Figure 3.174: RCDF plots for D29 Ab markers: baseline positive placebo arm by sex assigned at birth.



Figure 3.175: RCDF plots for D57 Ab markers: baseline positive placebo arm by sex assigned at birth.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT659



Figure 3.176: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by sex assigned at birth.



Figure 3.177: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by sex assigned at birth.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT661

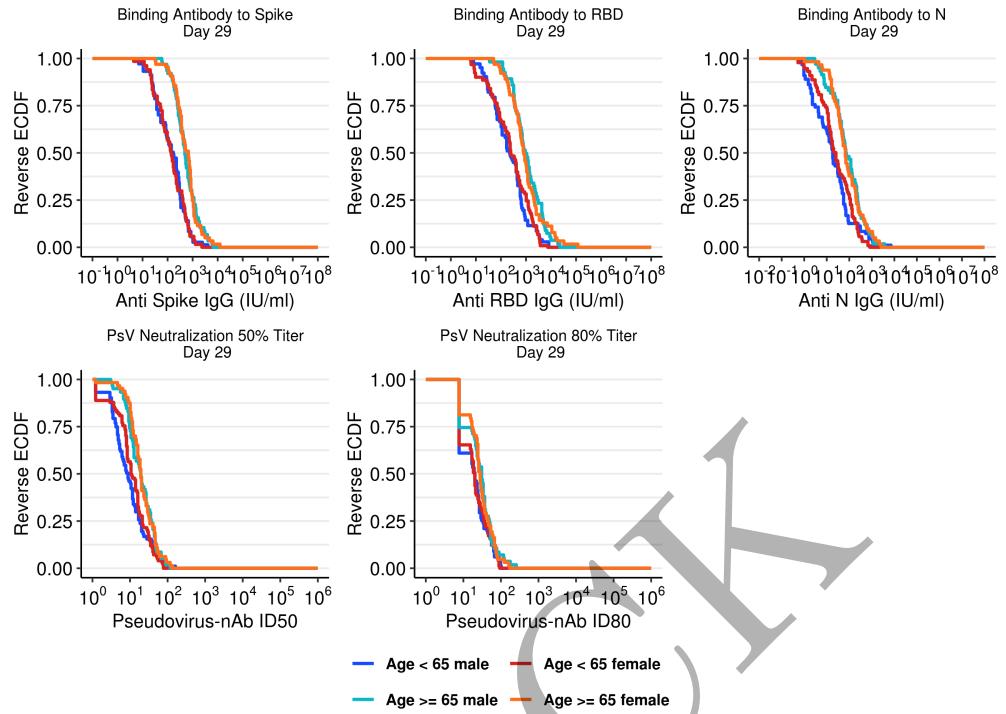


Figure 3.178: RCDF plots for D29 Ab markers: baseline positive placebo arm by age and sex assigned at birth.



Figure 3.179: RCDF plots for D57 Ab markers: baseline positive placebo arm by age and sex assigned at birth.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT663



Figure 3.180: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age and sex assigned at birth.



Figure 3.181: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by age and sex assigned at birth.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT665



Figure 3.182: RCDF plots for D29 Ab markers: baseline positive placebo arm by ethnicity.



Figure 3.183: RCDF plots for D57 Ab markers: baseline positive placebo arm by ethnicity.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT667



Figure 3.184: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by ethnicity.



Figure 3.185: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by ethnicity.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT669



Figure 3.186: RCDF plots for D29 Ab markers: baseline positive placebo arm by race.

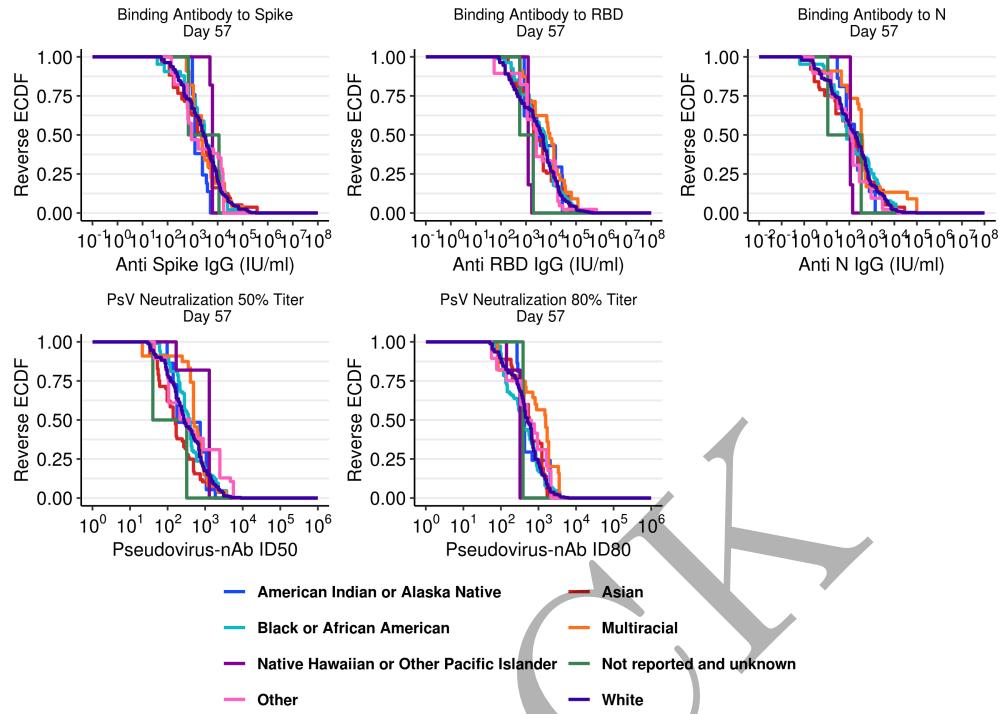


Figure 3.187: RCDF plots for D57 Ab markers: baseline positive placebo arm by race.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT671



Figure 3.188: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by race.



Figure 3.189: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by race.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT673



Figure 3.190: RCDF plots for D29 Ab markers: baseline positive placebo arm by dichotomous classification of race and ethnic group.

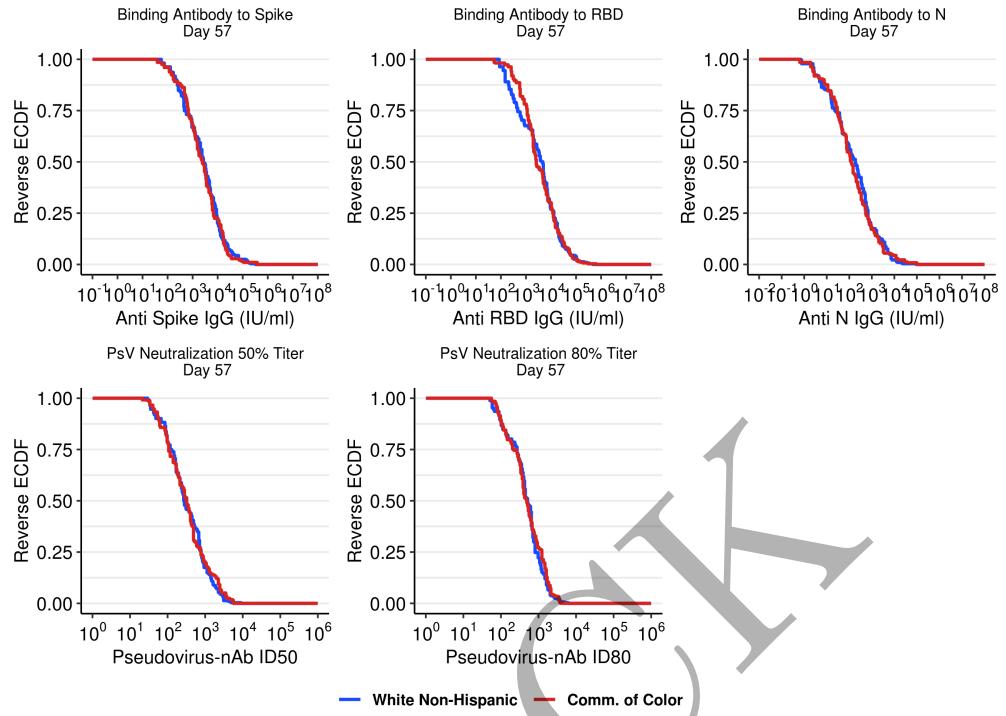


Figure 3.191: RCDF plots for D57 Ab markers: baseline positive placebo arm by dichotomous classification of race and ethnic group.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT675

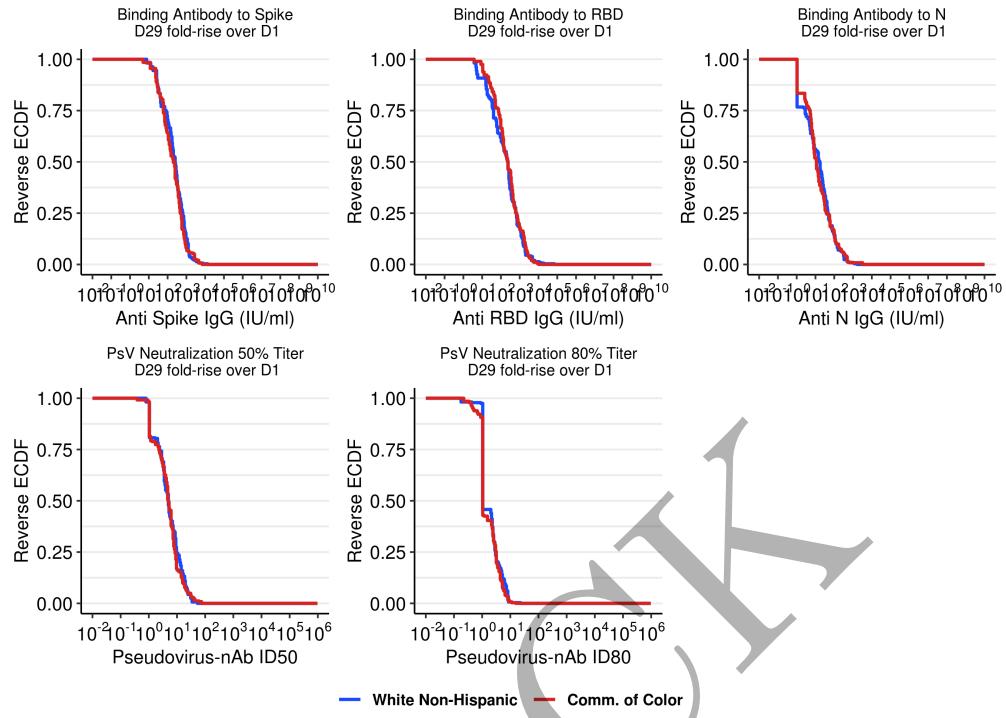


Figure 3.192: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by dichotomous classification of race and ethnic group.



Figure 3.193: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by dichotomous classification of race and ethnic group.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT677

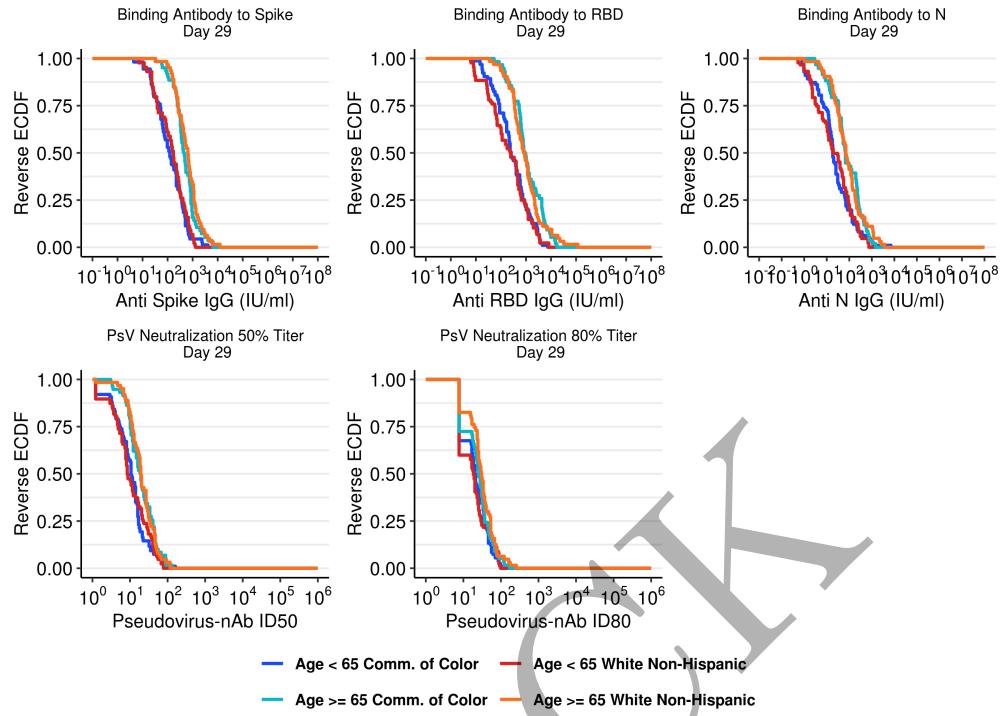


Figure 3.194: RCDF plots for D29 Ab markers: baseline positive placebo arm by age and dichotomous classification of race and ethnic group.



Figure 3.195: RCDF plots for D57 Ab markers: baseline positive placebo arm by age and dichotomous classification of race and ethnic group.

3.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT679



Figure 3.196: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age and dichotomous classification of race and ethnic group.

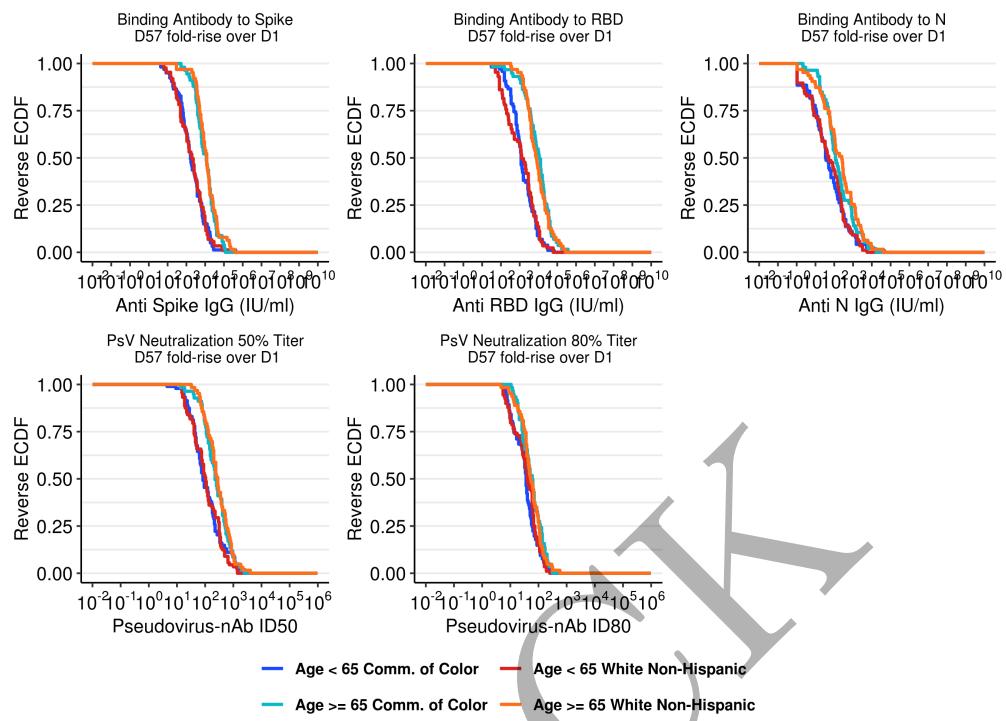


Figure 3.197: RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive placebo arm by age and dichotomous classification of race and ethnic group.

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

3.7.1 Baseline SARS-CoV-2 Negative

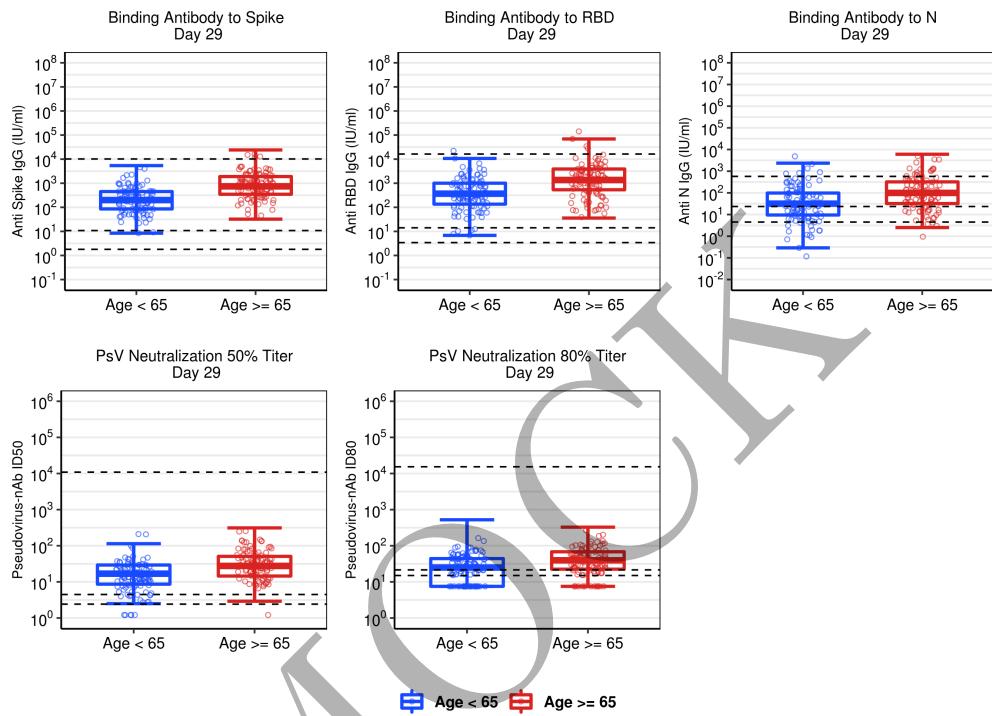


Figure 3.198: Boxplots of D29 Ab markers: Baseline negative vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.199: Boxplots of D57 Ab markers: Baseline negative vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT683



Figure 3.200: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age group.



Figure 3.201: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age group.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT685



Figure 3.202: Boxplots of D29 Ab markers: Baseline negative vaccine arm by high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.203: Boxplots of D57 Ab markers: Baseline negative vaccine arm by high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT687

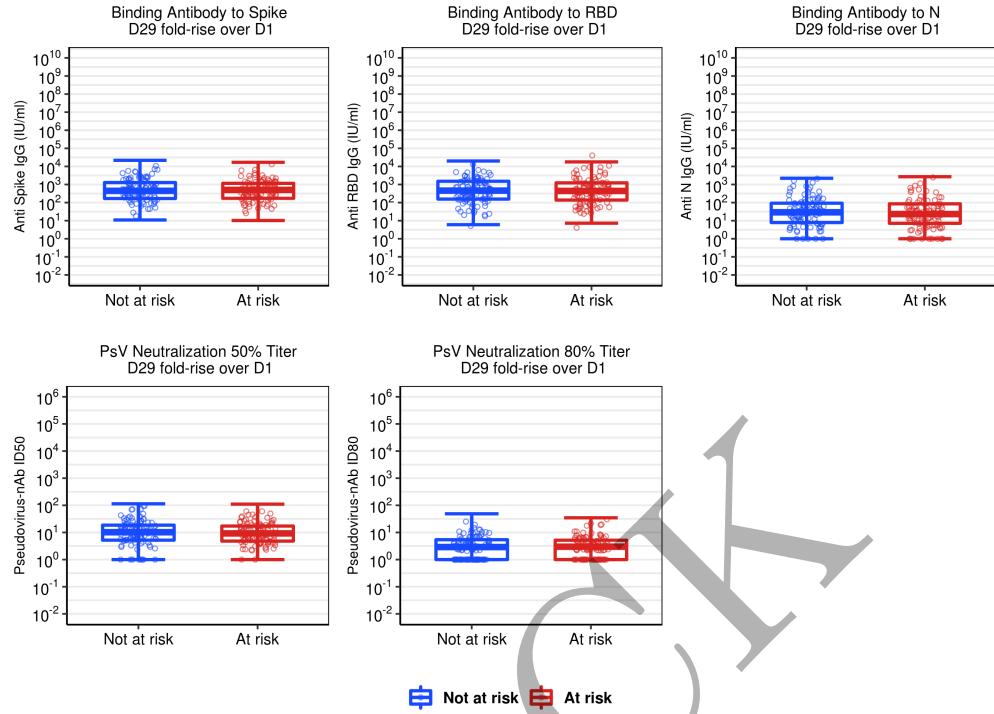


Figure 3.204: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by high-risk condition.



Figure 3.205: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by high-risk condition.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT689

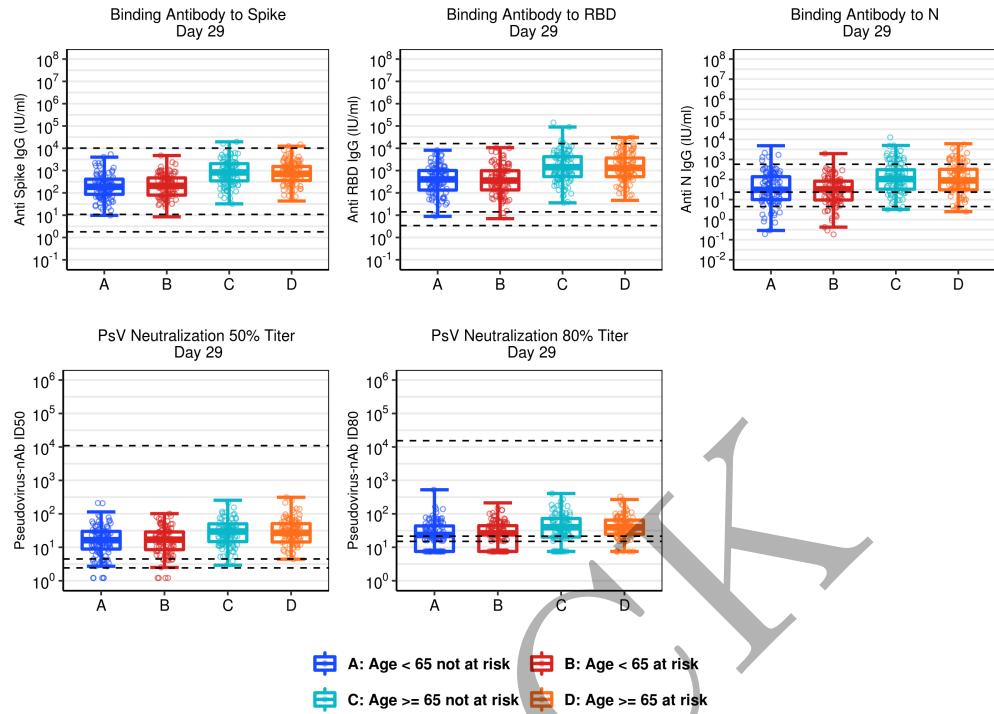


Figure 3.206: Boxplots of D29 Ab markers: Baseline negative vaccine arm by age and high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.207: Boxplots of D57 Ab markers: Baseline negative vaccine arm by age and high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT691



Figure 3.208: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and high-risk condition.



Figure 3.209: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and high-risk condition.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT693

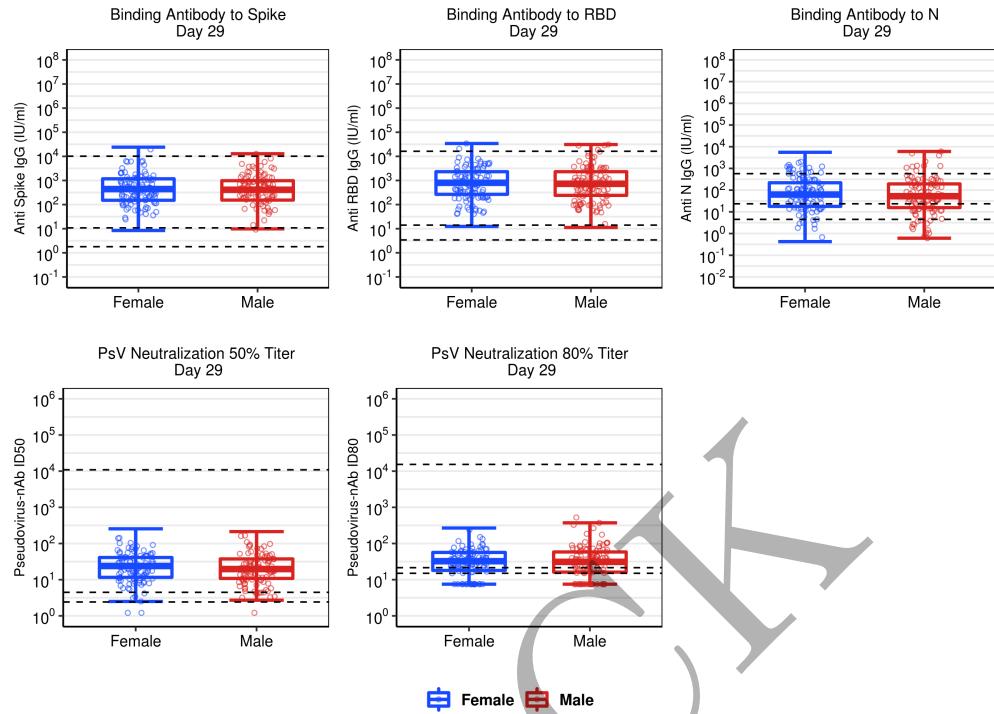


Figure 3.210: Boxplots of D29 Ab markers: Baseline negative vaccine arm by sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLQD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.211: Boxplots of D57 Ab markers: Baseline negative vaccine arm by sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLQD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT695



Figure 3.212: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by sex assigned at birth.



Figure 3.213: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by sex assigned at birth.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT697



Figure 3.214: Boxplots of D29 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.215: Boxplots of D57 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT699

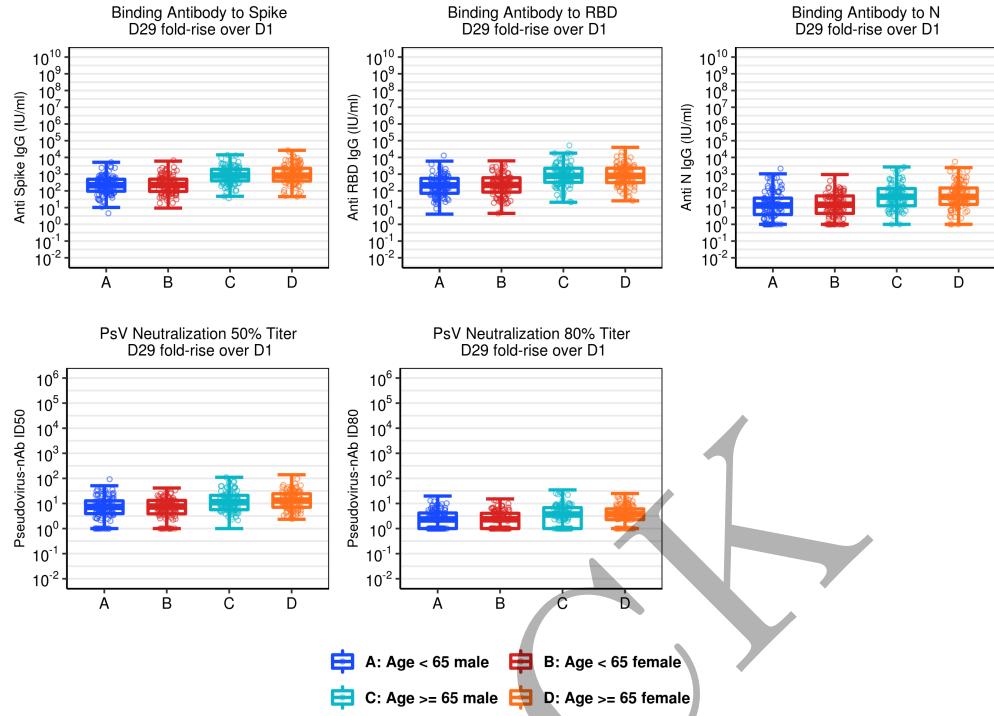


Figure 3.216: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

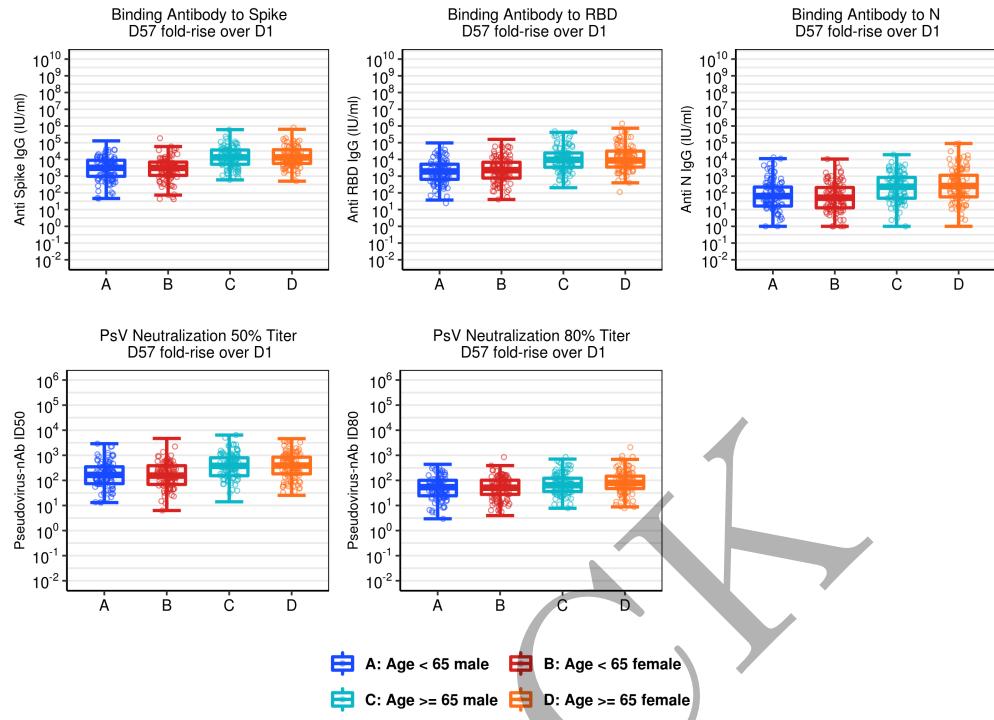


Figure 3.217: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT701



Figure 3.218: Boxplots of D29 Ab markers: Baseline negative vaccine arm by ethnicity. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.219: Boxplots of D57 Ab markers: Baseline negative vaccine arm by ethnicity. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT703



Figure 3.220: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.



Figure 3.221: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT705



Figure 3.222: Boxplots of D29 Ab markers: Baseline negative vaccine arm by race. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

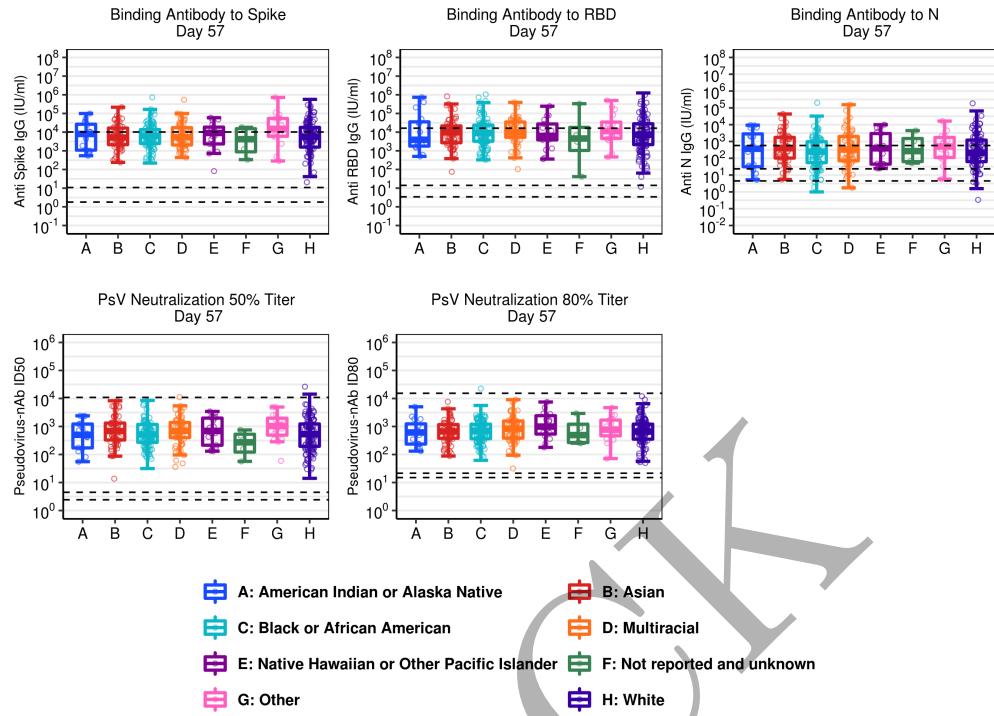


Figure 3.223: Boxplots of D57 Ab markers: Baseline negative vaccine arm by race. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT707



Figure 3.224: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.



Figure 3.225: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT709



Figure 3.226: Boxplots of D29 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.227: Boxplots of D57 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT711



Figure 3.228: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.



Figure 3.229: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT713



Figure 3.230: Boxplots of D29 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

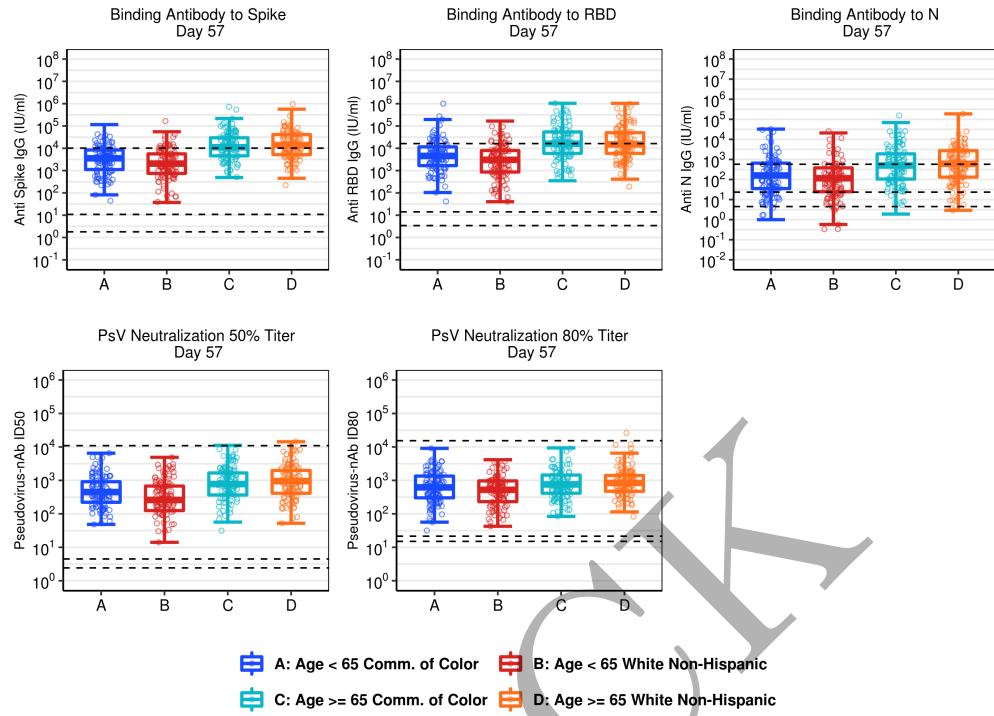


Figure 3.231: Boxplots of D57 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLQD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT715



Figure 3.232: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

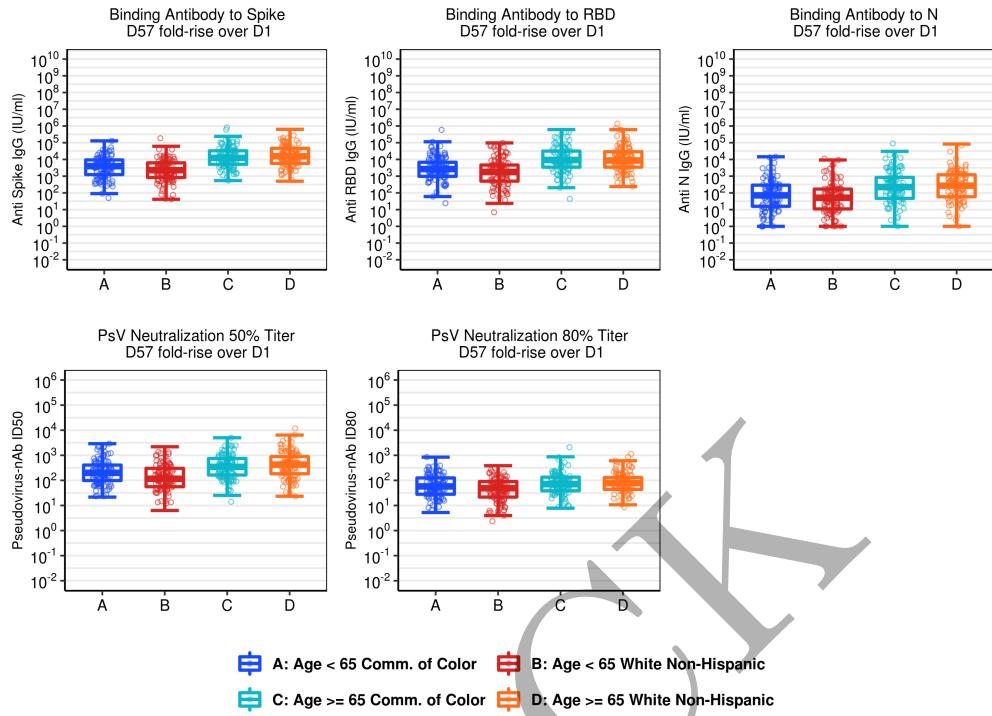


Figure 3.233: Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT717

3.7.2 Baseline SARS-CoV-2 Positive



Figure 3.234: Boxplots of D29 Ab markers: baseline positive vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.235: Boxplots of D57 Ab markers: baseline positive vaccine arm by age group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT719



Figure 3.236: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

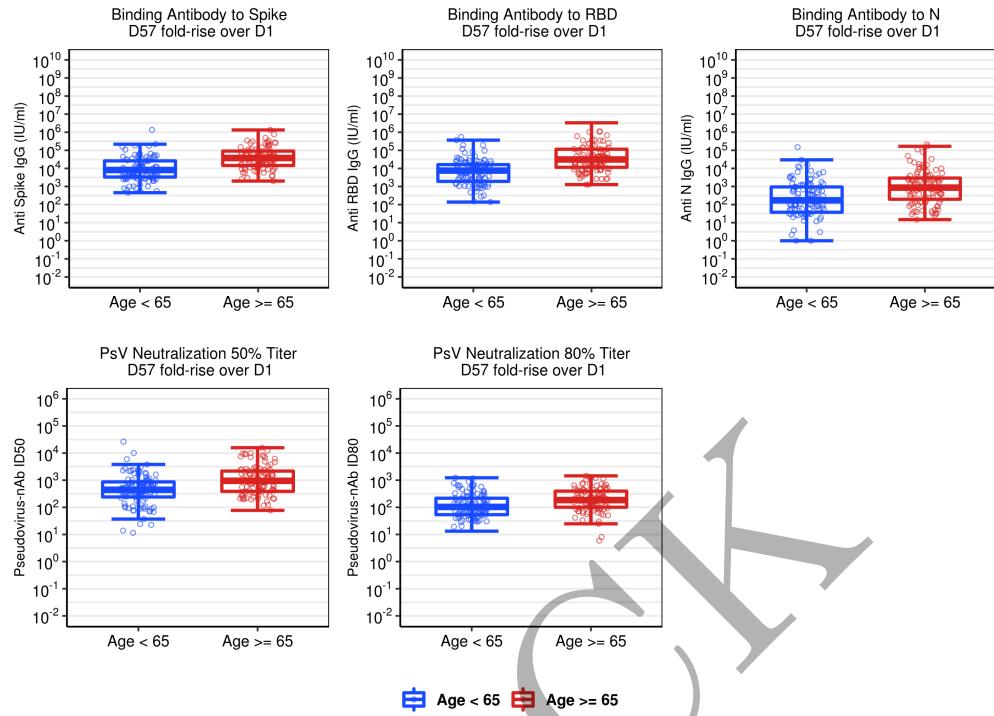


Figure 3.237: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT721



Figure 3.238: Boxplots of D29 Ab markers: baseline positive vaccine arm by high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.239: Boxplots of D57 Ab markers: baseline positive vaccine arm by high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT723



Figure 3.240: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.



Figure 3.241: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT725



Figure 3.242: Boxplots of D29 Ab markers: baseline positive vaccine arm by age and high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.243: Boxplots of D57 Ab markers: baseline positive vaccine arm by age and high-risk condition. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT727

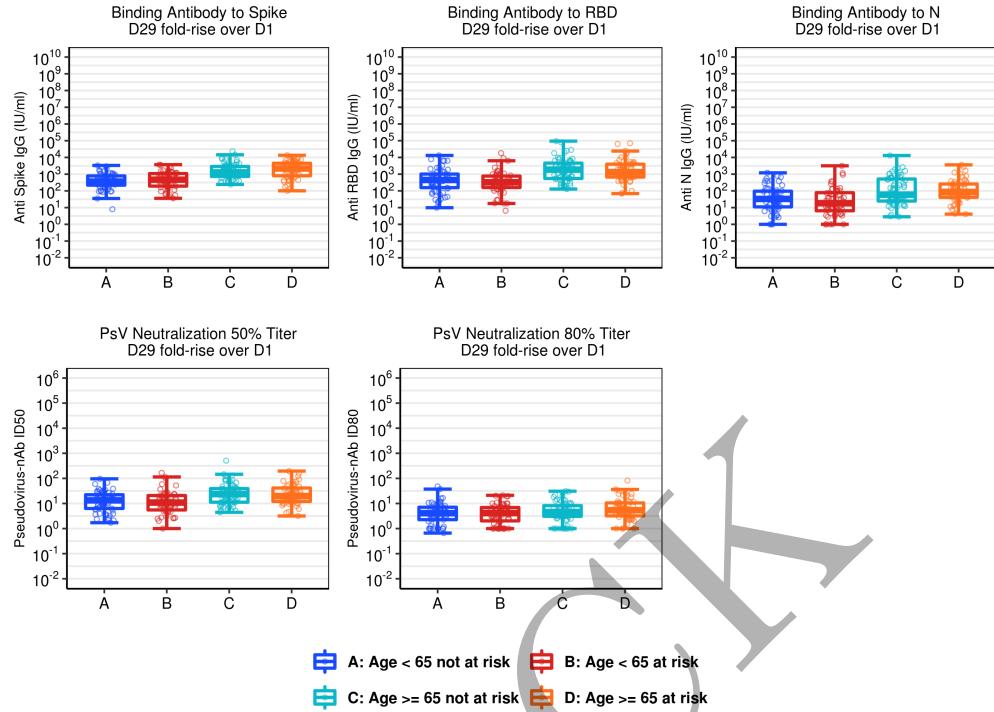


Figure 3.244: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.



Figure 3.245: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT729



Figure 3.246: Boxplots of D29 Ab markers: baseline positive vaccine arm by sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.247: Boxplots of D57 Ab markers: baseline positive vaccine arm by sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT731



Figure 3.248: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.



Figure 3.249: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT733



Figure 3.250: Boxplots of D29 Ab markers: baseline positive vaccine arm by age and sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.251: Boxplots of D57 Ab markers: baseline positive vaccine arm by age and sex assigned at birth. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT735



Figure 3.252: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

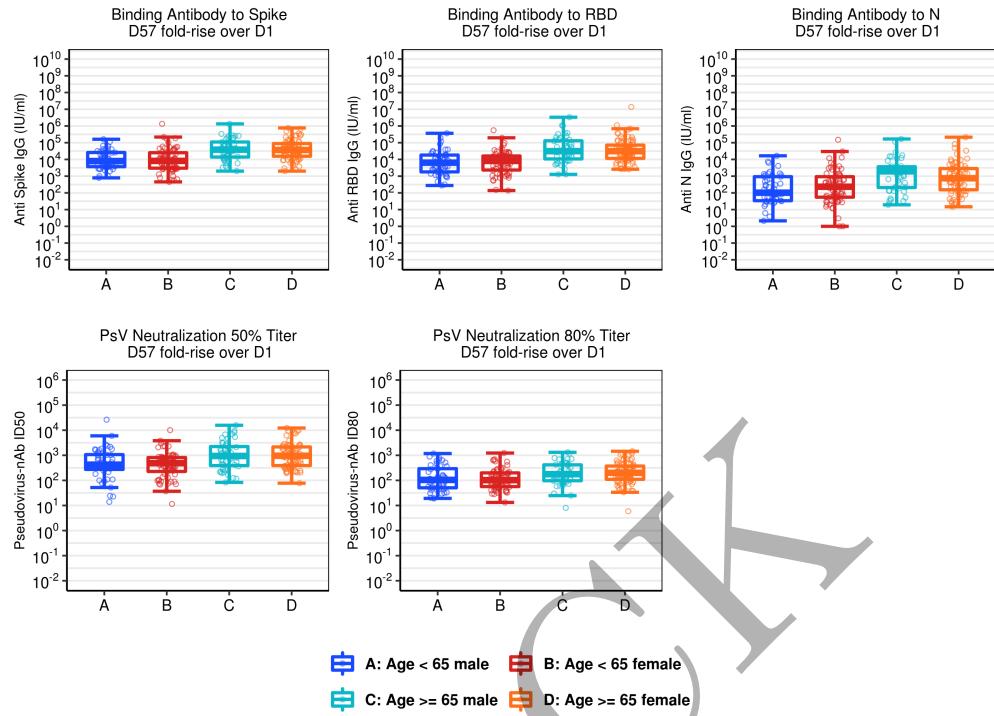


Figure 3.253: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT737



Figure 3.254: Boxplots of D29 Ab markers: baseline positive vaccine arm by ethnicity The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.255: Boxplots of D57 Ab markers: baseline positive vaccine arm by ethnicity. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT739

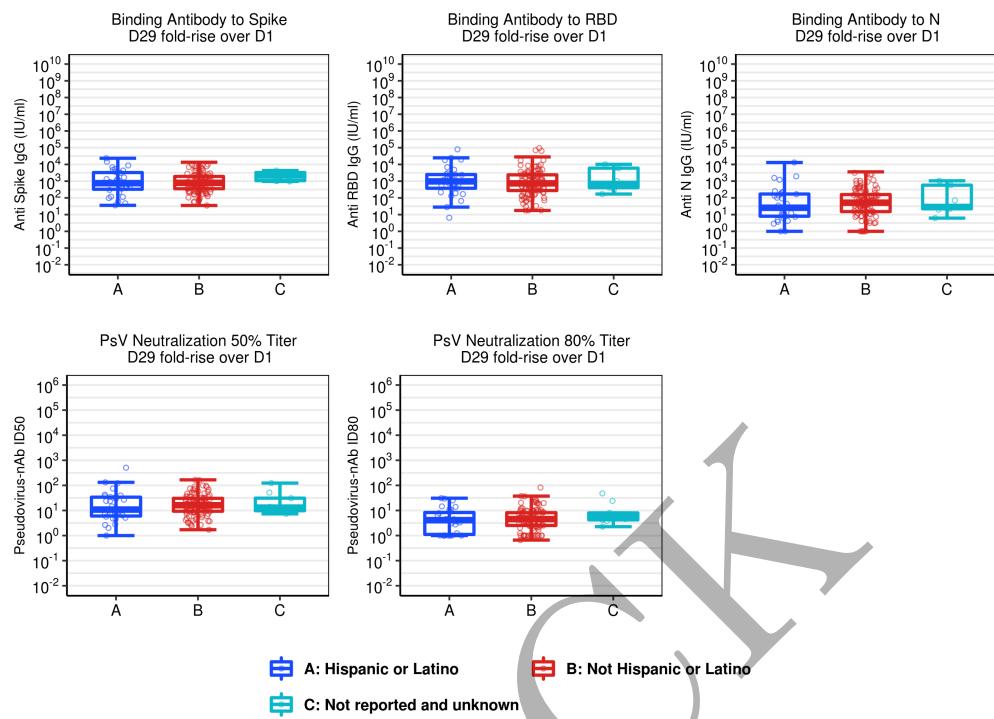


Figure 3.256: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.



Figure 3.257: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT741



Figure 3.258: Boxplots of D29 Ab markers: baseline positive vaccine arm by race. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.259: Boxplots of D57 Ab markers: baseline positive vaccine arm by race. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT743



Figure 3.260: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.



Figure 3.261: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT745



Figure 3.262: Boxplots of D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLQD for neutralizing antibody assays, from top to bottom respectively.

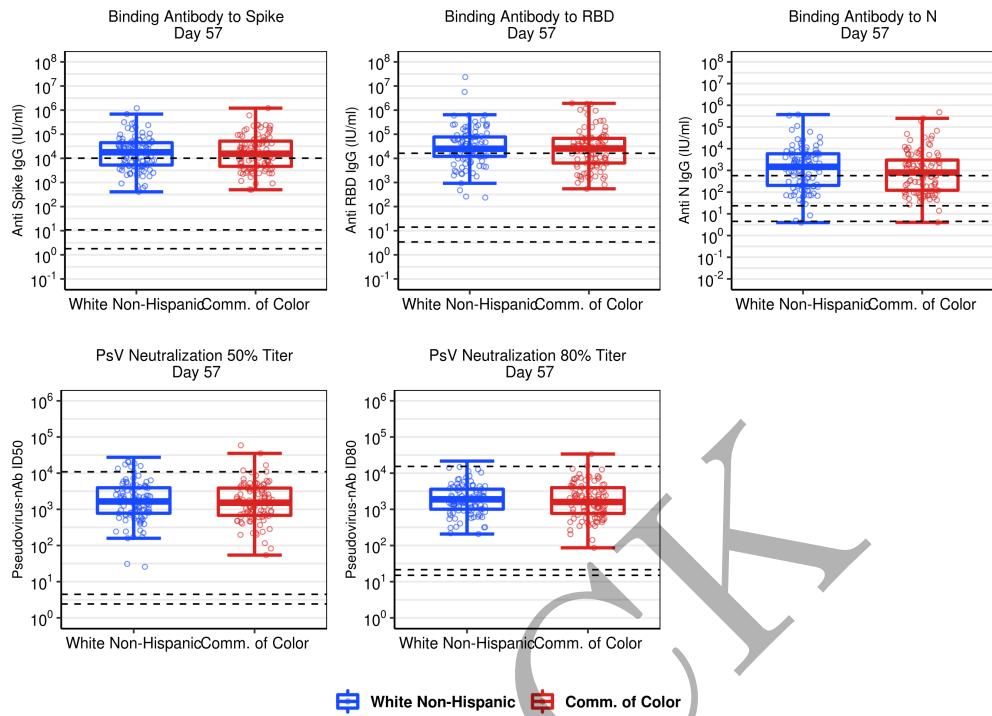


Figure 3.263: Boxplots of D57 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT747



Figure 3.264: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.



Figure 3.265: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT749



Figure 3.266: Boxplots of D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.



Figure 3.267: Boxplots of D57 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, LLOQ, and positivity cutoffs for binding antibody assays, or ULOQ, LLOQ, and LLOD for neutralizing antibody assays, from top to bottom respectively.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT751



Figure 3.268: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.



Figure 3.269: Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

3.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT753

#> [1] "running references ~~~~~"

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Chapter 4

Appendix

- This report was built from the [CoVPN/correlates_reporting](#) repository with commit hash 683d02f6659dc8a14ef4b2e298cd2266fd3b919e. A diff of the changes introduced by that commit may be viewed at https://github.com/CoVPN/correlates_reporting/commit/683d02f6659dc8a14ef4b2e298cd2266fd3b919e
- The sha256 hash sum of the raw input file, “COVID_VEtiral_practicedata_primarystage1.csv”: 83d0f55d1745ffd42be124d8f9ec9a9903abcc13cd22f95e537542a08b41300a
- The sha256 hash sum of the processed file, “moderna_mock_data_processed.csv”: d806a7fb38690eff7ecb69f0bd6f74afc5