

COVID-19 Immunogenicity Analysis Report  
MockENSEMBLE Study

USG COVID-19 Response Biostatistics Team

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MOCK

# Chapter 1

## Tabular Description of Immunogenicity Data

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

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

| Characteristics                      | Vaccine<br>(N = 913) | Placebo<br>(N = 109) | Total<br>(N = 1022) |
|--------------------------------------|----------------------|----------------------|---------------------|
| <b>Age</b>                           |                      |                      |                     |
| Age 18 - 59                          | 453 (49.6%)          | 54 (49.5%)           | 507 (49.6%)         |
| Age $\geq$ 60                        | 460 (50.4%)          | 55 (50.5%)           | 515 (50.4%)         |
| Mean (Range)                         | 56.1 (18.0, 85.0)    | 55.8 (18.0, 85.0)    | 56.1 (18.0, 85.0)   |
| <b>BMI</b>                           |                      |                      |                     |
| Underweight BMI < 18.5               | 14 (1.5%)            | 2 (1.8%)             | 16 (1.6%)           |
| Normal $18.5 \leq$ BMI < 25          | 174 (19.1%)          | 27 (24.8%)           | 201 (19.7%)         |
| Overweight $25 \leq$ BMI < 30        | 368 (40.3%)          | 45 (41.3%)           | 413 (40.4%)         |
| Obese BMI $\geq$ 30                  | 357 (39.1%)          | 35 (32.1%)           | 392 (38.4%)         |
| <b>Risk for Severe Covid-19</b>      |                      |                      |                     |
| At-risk                              | 454 (49.7%)          | 53 (48.6%)           | 507 (49.6%)         |
| Not at-risk                          | 459 (50.3%)          | 56 (51.4%)           | 515 (50.4%)         |
| <b>Age, Risk for Severe Covid-19</b> |                      |                      |                     |
| Age 18 - 59 At-risk                  | 226 (24.8%)          | 26 (23.9%)           | 252 (24.7%)         |
| Age 18 - 59 Not at-risk              | 227 (24.9%)          | 28 (25.7%)           | 255 (25.0%)         |
| Age $\geq$ 60 At-risk                | 228 (25.0%)          | 27 (24.8%)           | 255 (25.0%)         |
| Age $\geq$ 60 Not at-risk            | 232 (25.4%)          | 28 (25.7%)           | 260 (25.4%)         |
| <b>Sex</b>                           |                      |                      |                     |
| Female                               | 497 (54.4%)          | 54 (49.5%)           | 551 (53.9%)         |
| Male                                 | 416 (45.6%)          | 55 (50.5%)           | 471 (46.1%)         |
| <b>Hispanic or Latino ethnicity</b>  |                      |                      |                     |
| Hispanic or Latino                   | 374 (41.0%)          | 44 (40.4%)           | 418 (40.9%)         |
| Not Hispanic or Latino               | 477 (52.2%)          | 56 (51.4%)           | 533 (52.2%)         |

(continued)

| Characteristics                                     | Vaccine<br>(N = 913) | Placebo<br>(N = 109) | Total<br>(N = 1022) |
|---|----------------------|----------------------|---------------------|
| Not reported and unknown                            | 62 (6.8%)            | 9 (8.3%)             | 71 (6.9%)           |
| <b>Race</b>   |                      |                      |                     |
| White   | 375 (41.1%)          | 47 (43.1%)           | 422 (41.3%)         |
| Black or African American                           | 332 (36.4%)          | 38 (34.9%)           | 370 (36.2%)         |
| Asian   | 18 (2.0%)            | 2 (1.8%)             | 20 (2.0%)           |
| American Indian or Alaska Native                    | 149 (16.3%)          | 18 (16.5%)           | 167 (16.3%)         |
| Native Hawaiian or Other Pacific Islander           | 2 (0.2%)             |                      | 2 (0.2%)            |
| Multiracial   | 25 (2.7%)            | 2 (1.8%)             | 27 (2.6%)           |
| Not reported and unknown                            | 12 (1.3%)            | 2 (1.8%)             | 14 (1.4%)           |
| <b>Underrepresented Minority Status in the U.S.</b> |                      |                      |                     |
| URM   | 227 (24.9%)          | 28 (25.7%)           | 255 (25.0%)         |
| Non-URM   | 227 (24.9%)          | 28 (25.7%)           | 255 (25.0%)         |
| <b>Country</b>                                      |                      |                      |                     |
| United States                                       | 454 (49.7%)          | 56 (51.4%)           | 510 (49.9%)         |
| Argentina   | 45 (4.9%)            | 5 (4.6%)             | 50 (4.9%)           |
| Brazil  | 78 (8.5%)            | 15 (13.8%)           | 93 (9.1%)           |
| Chile   | 13 (1.4%)            | 1 (0.9%)             | 14 (1.4%)           |
| Columbia  | 64 (7.0%)            | 3 (2.8%)             | 67 (6.6%)           |
| Mexico  | 9 (1.0%)             | 1 (0.9%)             | 10 (1.0%)           |
| Peru  | 19 (2.1%)            | 1 (0.9%)             | 20 (2.0%)           |
| South Africa  | 231 (25.3%)          | 27 (24.8%)           | 258 (25.2%)         |
| <b>HIV Infection</b>                                |                      |                      |                     |
| Negative  | 848 (92.9%)          | 100 (91.7%)          | 948 (92.8%)         |
| Positive  | 65 (7.1%)            | 9 (8.3%)             | 74 (7.2%)           |

This table summarizes characteristics of per-protocol participants in the immunogenicity subcohort, which was randomly sampled from the study cohort. The sampling was stratified by strata defined by enrollment characteristics: Assigned randomization arm × Baseline SARS-CoV-2 seronegative vs. seropositive × Randomization strata. The U.S. subcohort includes 8 baseline demographic strata; the Latin America and South Africa subcohorts each include 4 baseline demographic strata.

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

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

| Characteristics                                     | Vaccine<br>(N = 283) | Placebo<br>(N = 280) | Total<br>(N = 563) |
|---|----------------------|----------------------|--------------------|
| <b>Age</b>  |                      |                      |                    |
| Age 18 - 59   | 141 (49.8%)          | 139 (49.6%)          | 280 (49.7%)        |
| Age ≥ 60  | 142 (50.2%)          | 141 (50.4%)          | 283 (50.3%)        |
| Mean (Range)  | 56.1 (18.0, 85.0)    | 56.4 (18.0, 85.0)    | 56.3 (18.0, 85.0)  |
| <b>BMI</b>  |                      |                      |                    |
| Underweight BMI < 18.5                              |                      | 2 (0.7%)             | 2 (0.4%)           |
| Normal 18.5 ≤ BMI < 25                              | 62 (21.9%)           | 45 (16.1%)           | 107 (19.0%)        |
| Overweight 25 ≤ BMI < 30                            | 112 (39.6%)          | 114 (40.7%)          | 226 (40.1%)        |
| Obese BMI ≥ 30                                      | 109 (38.5%)          | 119 (42.5%)          | 228 (40.5%)        |
| <b>Risk for Severe Covid-19</b>                     |                      |                      |                    |
| At-risk   | 140 (49.5%)          | 141 (50.4%)          | 281 (49.9%)        |
| Not at-risk   | 143 (50.5%)          | 139 (49.6%)          | 282 (50.1%)        |
| <b>Age, Risk for Severe Covid-19</b>                |                      |                      |                    |
| Age 18 - 59 At-risk                                 | 69 (24.4%)           | 69 (24.6%)           | 138 (24.5%)        |
| Age 18 - 59 Not at-risk                             | 72 (25.4%)           | 70 (25.0%)           | 142 (25.2%)        |
| Age ≥ 60 At-risk                                    | 71 (25.1%)           | 72 (25.7%)           | 143 (25.4%)        |
| Age ≥ 60 Not at-risk                                | 71 (25.1%)           | 69 (24.6%)           | 140 (24.9%)        |
| <b>Sex</b>  |                      |                      |                    |
| Female  | 160 (56.5%)          | 154 (55.0%)          | 314 (55.8%)        |
| Male  | 123 (43.5%)          | 126 (45.0%)          | 249 (44.2%)        |
| <b>Hispanic or Latino ethnicity</b>                 |                      |                      |                    |
| Hispanic or Latino                                  | 106 (37.5%)          | 105 (37.5%)          | 211 (37.5%)        |
| Not Hispanic or Latino                              | 164 (58.0%)          | 152 (54.3%)          | 316 (56.1%)        |
| Not reported and unknown                            | 13 (4.6%)            | 23 (8.2%)            | 36 (6.4%)          |
| <b>Race</b>   |                      |                      |                    |
| White   | 108 (38.2%)          | 108 (38.6%)          | 216 (38.4%)        |
| Black or African American                           | 111 (39.2%)          | 94 (33.6%)           | 205 (36.4%)        |
| Asian   | 5 (1.8%)             | 10 (3.6%)            | 15 (2.7%)          |
| American Indian or Alaska Native                    | 49 (17.3%)           | 48 (17.1%)           | 97 (17.2%)         |
| Native Hawaiian or Other Pacific Islander           |                      | 1 (0.4%)             | 1 (0.2%)           |
| Multiracial   | 9 (3.2%)             | 15 (5.4%)            | 24 (4.3%)          |
| Not reported and unknown                            | 1 (0.4%)             | 4 (1.4%)             | 5 (0.9%)           |
| <b>Underrepresented Minority Status in the U.S.</b> |                      |                      |                    |
| URM   | 71 (25.1%)           | 70 (25.0%)           | 141 (25.0%)        |
| Non-URM   | 71 (25.1%)           | 71 (25.4%)           | 142 (25.2%)        |
| <b>Country</b>                                      |                      |                      |                    |
| United States                                       | 142 (50.2%)          | 141 (50.4%)          | 283 (50.3%)        |
| Argentina   | 11 (3.9%)            | 16 (5.7%)            | 27 (4.8%)          |
| Brazil  | 29 (10.2%)           | 30 (10.7%)           | 59 (10.5%)         |
| Chile   | 1 (0.4%)             | 1 (0.4%)             | 2 (0.4%)           |
| Columbia  | 20 (7.1%)            | 13 (4.6%)            | 33 (5.9%)          |
| Mexico  | 4 (1.4%)             | 5 (1.8%)             | 9 (1.6%)           |

(continued)

| Characteristics      | Vaccine<br>(N = 283) | Placebo<br>(N = 280) | Total<br>(N = 563) |
|----------------------|----------------------|----------------------|--------------------|
| Peru                 | 6 (2.1%)             | 5 (1.8%)             | 11 (2.0%)          |
| South Africa         | 70 (24.7%)           | 69 (24.6%)           | 139 (24.7%)        |
| <b>HIV Infection</b> |                      |                      |                    |
| Negative             | 265 (93.6%)          | 266 (95.0%)          | 531 (94.3%)        |
| Positive             | 18 (6.4%)            | 14 (5.0%)            | 32 (5.7%)          |

This table summarizes characteristics of per-protocol participants in the immunogenicity subcohort, which was randomly sampled from the study cohort. The sampling was stratified by strata defined by enrollment characteristics: Assigned randomization arm × Baseline SARS-CoV-2 seronegative vs. seropositive × Randomization strata. The U.S. subcohort includes 8 baseline demographic strata; the Latin America and South Africa subcohorts each include 4 baseline demographic strata.

### 1.3 Sample Sizes of Random Subcohort Strata for Measuring Antibody Markers

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

| U.S. Random Subcohort Sample Sizes (N=793 Participants) (Janssen Trial) |                              |      |     |     |      |      |     |     |                              |     |    |    |     |     |     |    |
|---|------------------------------|------|-----|-----|------|------|-----|-----|------------------------------|-----|----|----|-----|-----|-----|----|
|   | Baseline SARS-CoV-2 Negative |      |     |     |      |      |     |     | Baseline SARS-CoV-2 Positive |     |    |    |     |     |     |    |
|   | 1                            | 2    | 3   | 4   | 5    | 6    | 7   | 8   | 1                            | 2   | 3  | 4  | 5   | 6   | 7   | 8  |
| <b>Vaccine</b>  |                              |      |     |     |      |      |     |     |                              |     |    |    |     |     |     |    |
| Observed  | 57                           | 56   | 58  | 56  | 56   | 55   | 58  | 58  | 18                           | 18  | 17 | 18 | 18  | 17  | 18  | 18 |
| Estimated   | 1522                         | 1048 | 801 | 568 | 1854 | 1211 | 935 | 659 | 191                          | 131 | 76 | 61 | 199 | 121 | 123 | 76 |
| <b>Placebo</b>  |                              |      |     |     |      |      |     |     |                              |     |    |    |     |     |     |    |
| Observed  | 7                            | 7    | 7   | 7   | 7    | 7    | 7   | 7   | 18                           | 17  | 17 | 18 | 17  | 18  | 18  | 18 |
| Estimated   | 1442                         | 993  | 813 | 522 | 1860 | 1270 | 957 | 671 | 159                          | 115 | 93 | 51 | 174 | 115 | 82  | 68 |

Demographic covariate strata:

1. US Underrepresented minority, Age 18-59, Absence of comorbidities
2. US Underrepresented minority, Age 18-59, Presence of comorbidities
3. US Underrepresented minority, Age  $\geq 60$ , Absence of comorbidities
4. US Underrepresented minority, Age  $\geq 60$ , Presence of comorbidities
5. US White non-Hisp, Age 18-59, Absence of comorbidities
6. US White non-Hisp, Age 18-59, Presence of comorbidities
7. US White non-Hisp, Age  $\geq 60$ , Absence of comorbidities
8. US White non-Hisp, Age  $\geq 60$ , Presence of comorbidities

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

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

## 1.4 Sample Sizes of Random Subcohort Strata for Measuring Antibody Markers

Table 4. Sample Sizes of Random Subcohort Strata for Measuring Antibody Markers

| Latin America and South Africa Random Subcohort Sample Sizes (N=792 Participants) (Janssen Trial) |                              |      |      |      |      |     |     |     |                              |     |     |     |     |    |    |    |
|---|------------------------------|------|------|------|------|-----|-----|-----|------------------------------|-----|-----|-----|-----|----|----|----|
|   | Baseline SARS-CoV-2 Negative |      |      |      |      |     |     |     | Baseline SARS-CoV-2 Positive |     |     |     |     |    |    |    |
|   | 1                            | 2    | 3    | 4    | 5    | 6   | 7   | 8   | 1                            | 2   | 3   | 4   | 5   | 6  | 7  | 8  |
| <b>Vaccine</b>  |                              |      |      |      |      |     |     |     |                              |     |     |     |     |    |    |    |
| Observed  | 57                           | 57   | 58   | 56   | 57   | 58  | 58  | 58  | 18                           | 18  | 18  | 17  | 18  | 16 | 18 | 18 |
| Estimated   | 3021                         | 2018 | 1653 | 1051 | 1154 | 787 | 598 | 412 | 322                          | 219 | 164 | 124 | 114 | 83 | 58 | 40 |
| <b>Placebo</b>  |                              |      |      |      |      |     |     |     |                              |     |     |     |     |    |    |    |
| Observed  | 7                            | 6    | 7    | 6    | 7    | 6   | 7   | 7   | 18                           | 16  | 18  | 18  | 17  | 18 | 16 | 18 |
| Estimated   | 3012                         | 2083 | 1748 | 1099 | 1148 | 704 | 576 | 435 | 347                          | 222 | 182 | 119 | 103 | 81 | 43 | 25 |

Demographic covariate strata:

1. Latin America, Age 18-59, Absence of comorbidities
2. Latin America, Age 18-59, Presence of comorbidities
3. Latin America, Age  $\geq 60$ , Absence of comorbidities
4. Latin America, Age  $\geq 60$ , Presence of comorbidities
5. South Africa, Age 18-59, Absence of comorbidities
6. South Africa, Age 18-59, Presence of comorbidities
7. South Africa, Age  $\geq 60$ , Absence of comorbidities
8. South Africa, Age  $\geq 60$ , Presence of comorbidities

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

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

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

Table 5a. 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          |
|-------------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| <b>All participants</b> |        |         |                     |                         |     |   |   |   |
|                         | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 913 | 1147.9/19292 = 6.0%<br>(4.7%, 7.5%)     | 3005.2/19292 = 15.6%<br>(13.4%, 18.1%)  | 1609/19292 = 8.3%<br>(6.8%, 10.3%)      |
|                         | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 913 | 10495.8/19292 = 54.4%<br>(50.8%, 58.0%) | 11972.4/19292 = 62.1%<br>(58.5%, 65.5%) | 9022.3/19292 = 46.8%<br>(43.2%, 50.3%)  |
|                         | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 913 | 9225.7/19292 = 47.8%<br>(44.3%, 51.3%)  | 14549.4/19292 = 75.4%<br>(72.1%, 78.5%) | 11326.9/19292 = 58.7%<br>(55.1%, 62.2%) |
|                         | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 283 | 222.1/2102 = 10.6%<br>(7.4%, 14.9%)     | 492/2102 = 23.4%<br>(18.5%, 29.1%)      | 309.4/2102 = 14.7%<br>(10.8%, 19.7%)    |
|                         | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 283 | 1569.2/2102 = 74.7%<br>(68.5%, 80.0%)   | 1685.1/2102 = 80.2%<br>(74.4%, 84.9%)   | 1272.8/2102 = 60.6%<br>(54.2%, 66.6%)   |
|                         | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 283 | 1310.4/2102 = 62.3%<br>(55.7%, 68.6%)   | 1847.3/2102 = 87.9%<br>(82.4%, 91.8%)   | 1471.2/2102 = 70.0%<br>(63.5%, 75.8%)   |
|                         | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 109 | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          |
|                         | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 109 | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          |
|                         | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 109 | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          |
|                         | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 280 | 61.5/1979 = 3.1%<br>(1.6%, 5.8%)        | 203.5/1979 = 10.3%<br>(7.5%, 14.0%)     | 76.5/1979 = 3.9%<br>(2.2%, 6.7%)        |
|                         | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 280 | 753.1/1979 = 38.1%<br>(32.2%, 44.3%)    | 981.2/1979 = 49.6%<br>(43.1%, 56.0%)    | 578.5/1979 = 29.2%<br>(24.6%, 34.4%)    |

|        |         |          |                         |     |                                      |                                       |                                      |
|--------|---------|----------|-------------------------|-----|--------------------------------------|---------------------------------------|--------------------------------------|
| Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 280 | 636.7/1979 = 32.2%<br>(26.9%, 37.9%) | 1156.6/1979 = 58.4%<br>(51.8%, 64.8%) | 752.3/1979 = 38.0%<br>(32.4%, 44.0%) |
|--------|---------|----------|-------------------------|-----|--------------------------------------|---------------------------------------|--------------------------------------|

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 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         |
|---------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| <b>Age</b>    |        |         |                     |                         |     |  |  |  |
| Age 18 - 59   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 453 | 301.7/12615 = 2.4%<br>(1.4%, 4.2%)     | 1147.1/12615 = 9.1%<br>(6.7%, 12.2%)   | 518.8/12615 = 4.1%<br>(2.6%, 6.4%)     |
| Age 18 - 59   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 453 | 5383.1/12615 = 42.7%<br>(37.8%, 47.7%) | 6355/12615 = 50.4%<br>(45.4%, 55.4%)   | 4392.4/12615 = 34.8%<br>(30.2%, 39.8%) |
| Age 18 - 59   | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 453 | 4453.6/12615 = 35.3%<br>(30.7%, 40.2%) | 8294.6/12615 = 65.8%<br>(60.8%, 70.4%) | 5991.1/12615 = 47.5%<br>(42.5%, 52.5%) |
| Age 18 - 59   | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 141 | 81.9/1380 = 5.9%<br>(2.8%, 12.0%)      | 236.3/1380 = 17.1%<br>(11.4%, 24.9%)   | 145.7/1380 = 10.6%<br>(6.2%, 17.4%)    |
| Age 18 - 59   | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 925/1380 = 67.0%<br>(58.2%, 74.8%)     | 1029.7/1380 = 74.6%<br>(66.3%, 81.5%)  | 670.6/1380 = 48.6%<br>(39.9%, 57.4%)   |
| Age 18 - 59   | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 141 | 715.4/1380 = 51.8%<br>(42.7%, 60.8%)   | 1154.7/1380 = 83.7%<br>(75.7%, 89.4%)  | 831.2/1380 = 60.2%<br>(51.1%, 68.7%)   |
| Age 18 - 59   | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 54  | 0/12512 = 0.0%<br>(0.0%, 0.0%)         | 0/12512 = 0.0%<br>(0.0%, 0.0%)         | 0/12512 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59   | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 54  | 0/12512 = 0.0%<br>(0.0%, 0.0%)         | 0/12512 = 0.0%<br>(0.0%, 0.0%)         | 0/12512 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 54  | 0/12512 = 0.0%<br>(0.0%, 0.0%)         | 0/12512 = 0.0%<br>(0.0%, 0.0%)         | 0/12512 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 139 | 20.8/1316 = 1.6%<br>(0.5%, 5.2%)       | 46.9/1316 = 3.6%<br>(1.6%, 7.6%)       | 20.8/1316 = 1.6%<br>(0.5%, 5.2%)       |
| Age 18 - 59   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 139 | 316.1/1316 = 24.0%<br>(17.1%, 32.6%)   | 475.4/1316 = 36.1%<br>(27.9%, 45.2%)   | 193.3/1316 = 14.7%<br>(10.0%, 21.1%)   |
| Age 18 - 59   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 139 | 232.3/1316 = 17.7%<br>(11.8%, 25.5%)   | 576.6/1316 = 43.8%<br>(34.9%, 53.2%)   | 279.7/1316 = 21.3%<br>(14.7%, 29.7%)   |
| Age $\geq$ 60 | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 460 | 846.2/6677 = 12.7%<br>(9.8%, 16.3%)    | 1858/6677 = 27.8%<br>(23.5%, 32.6%)    | 1090.2/6677 = 16.3%<br>(13.0%, 20.3%)  |
| Age $\geq$ 60 | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 460 | 5112.7/6677 = 76.6%<br>(72.1%, 80.5%)  | 5617.4/6677 = 84.1%<br>(80.1%, 87.5%)  | 4629.9/6677 = 69.3%<br>(64.5%, 73.8%)  |
| Age $\geq$ 60 | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 460 | 4772.1/6677 = 71.5%<br>(66.8%, 75.8%)  | 6254.8/6677 = 93.7%<br>(91.0%, 95.6%)  | 5335.8/6677 = 79.9%<br>(75.7%, 83.6%)  |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                           | % Greater than 2 × LLOQ             | % Greater than 4 × LLOQ             |
|----------|--------|---------|---------------------|-------------------------|-----|-------------------------------------|-------------------------------------|-------------------------------------|
| Age ≥ 60 | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 142 | 140.2/722 = 19.4%<br>(13.2%, 27.6%) | 255.7/722 = 35.4%<br>(27.4%, 44.4%) | 163.7/722 = 22.7%<br>(16.1%, 31.0%) |
| Age ≥ 60 | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 142 | 644.2/722 = 89.2%<br>(82.7%, 93.5%) | 655.4/722 = 90.8%<br>(84.4%, 94.7%) | 602.2/722 = 83.4%<br>(75.8%, 89.0%) |
| Age ≥ 60 | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 142 | 595.1/722 = 82.4%<br>(74.4%, 88.3%) | 692.6/722 = 95.9%<br>(89.9%, 98.4%) | 640.1/722 = 88.7%<br>(81.3%, 93.3%) |
| Age ≥ 60 | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 55  | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       |
| Age ≥ 60 | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 55  | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       |
| Age ≥ 60 | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 55  | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       |
| Age ≥ 60 | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 40.7/663 = 6.1%<br>(2.9%, 12.4%)    | 156.6/663 = 23.6%<br>(16.6%, 32.4%) | 55.7/663 = 8.4%<br>(4.5%, 15.2%)    |
| Age ≥ 60 | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 436.9/663 = 65.9%<br>(56.1%, 74.5%) | 505.8/663 = 76.3%<br>(66.8%, 83.7%) | 385.2/663 = 58.1%<br>(48.4%, 67.2%) |
| Age ≥ 60 | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 404.4/663 = 61.0%<br>(51.5%, 69.7%) | 580/663 = 87.5%<br>(79.1%, 92.8%)   | 472.7/663 = 71.3%<br>(61.8%, 79.2%) |

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 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         |
|---------------------------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| <b>Risk for Severe Covid-19</b> |        |         |                     |                         |     |  |  |  |
| At-risk                         | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 454 | 596.8/7754 = 7.7%<br>(5.5%, 10.6%)     | 1264.2/7754 = 16.3%<br>(13.0%, 20.2%)  | 752.2/7754 = 9.7%<br>(7.2%, 13.0%)     |
| At-risk                         | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 454 | 4049.4/7754 = 52.2%<br>(47.3%, 57.1%)  | 4897/7754 = 63.2%<br>(58.2%, 67.9%)    | 3593.2/7754 = 46.3%<br>(41.5%, 51.3%)  |
| At-risk                         | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 454 | 3832.8/7754 = 49.4%<br>(44.5%, 54.4%)  | 5839.7/7754 = 75.3%<br>(70.6%, 79.5%)  | 4625/7754 = 59.6%<br>(54.6%, 64.5%)    |
| At-risk                         | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 140 | 84/855 = 9.8%<br>(5.7%, 16.4%)         | 180.6/855 = 21.1%<br>(15.1%, 28.8%)    | 111.3/855 = 13.0%<br>(8.3%, 19.9%)     |
| At-risk                         | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 140 | 637.1/855 = 74.5%<br>(65.8%, 81.6%)    | 684.9/855 = 80.1%<br>(71.8%, 86.4%)    | 556.5/855 = 65.1%<br>(56.0%, 73.2%)    |
| At-risk                         | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 140 | 557.1/855 = 65.2%<br>(56.0%, 73.3%)    | 772.5/855 = 90.4%<br>(82.8%, 94.8%)    | 620.9/855 = 72.6%<br>(63.6%, 80.1%)    |
| At-risk                         | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 53  | 0/7777 = 0.0%<br>(0.0%, 0.0%)          | 0/7777 = 0.0%<br>(0.0%, 0.0%)          | 0/7777 = 0.0%<br>(0.0%, 0.0%)          |
| At-risk                         | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 53  | 0/7777 = 0.0%<br>(0.0%, 0.0%)          | 0/7777 = 0.0%<br>(0.0%, 0.0%)          | 0/7777 = 0.0%<br>(0.0%, 0.0%)          |
| At-risk                         | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 53  | 0/7777 = 0.0%<br>(0.0%, 0.0%)          | 0/7777 = 0.0%<br>(0.0%, 0.0%)          | 0/7777 = 0.0%<br>(0.0%, 0.0%)          |
| At-risk                         | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 23.3/796 = 2.9%<br>(1.3%, 6.7%)        | 99.2/796 = 12.5%<br>(8.3%, 18.3%)      | 32.8/796 = 4.1%<br>(2.0%, 8.3%)        |
| At-risk                         | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 309.6/796 = 38.9%<br>(30.9%, 47.5%)    | 436.4/796 = 54.8%<br>(45.4%, 63.9%)    | 258.9/796 = 32.5%<br>(25.5%, 40.5%)    |
| At-risk                         | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 299.2/796 = 37.6%<br>(30.0%, 45.8%)    | 513/796 = 64.5%<br>(55.0%, 72.9%)      | 317.2/796 = 39.8%<br>(32.2%, 48.1%)    |
| Not at-risk                     | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 459 | 551.2/11538 = 4.8%<br>(3.3%, 6.8%)     | 1741/11538 = 15.1%<br>(12.2%, 18.5%)   | 856.8/11538 = 7.4%<br>(5.5%, 9.9%)     |
| Not at-risk                     | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 459 | 6446.4/11538 = 55.9%<br>(50.8%, 60.8%) | 7075.5/11538 = 61.3%<br>(56.3%, 66.1%) | 5429.1/11538 = 47.1%<br>(42.2%, 52.0%) |
| Not at-risk                     | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 459 | 5392.9/11538 = 46.7%<br>(42.0%, 51.6%) | 8709.8/11538 = 75.5%<br>(70.7%, 79.7%) | 6701.9/11538 = 58.1%<br>(53.1%, 62.9%) |

(continued)

| Group       | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                            | % Greater than 2 × LLOQ               | % Greater than 4 × LLOQ              |
|-------------|--------|---------|---------------------|-------------------------|-----|--------------------------------------|---------------------------------------|--------------------------------------|
| Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 143 | 138.1/1247 = 11.1%<br>(6.8%, 17.5%)  | 311.5/1247 = 25.0%<br>(18.2%, 33.3%)  | 198.1/1247 = 15.9%<br>(10.5%, 23.3%) |
| Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 143 | 932/1247 = 74.7%<br>(65.8%, 82.0%)   | 1000.3/1247 = 80.2%<br>(71.8%, 86.6%) | 716.3/1247 = 57.4%<br>(48.5%, 65.9%) |
| Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 143 | 753.3/1247 = 60.4%<br>(51.0%, 69.1%) | 1074.8/1247 = 86.2%<br>(77.9%, 91.7%) | 850.3/1247 = 68.2%<br>(58.9%, 76.2%) |
| Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0/11556 = 0.0%<br>(0.0%, 0.0%)       | 0/11556 = 0.0%<br>(0.0%, 0.0%)        | 0/11556 = 0.0%<br>(0.0%, 0.0%)       |
| Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0/11556 = 0.0%<br>(0.0%, 0.0%)       | 0/11556 = 0.0%<br>(0.0%, 0.0%)        | 0/11556 = 0.0%<br>(0.0%, 0.0%)       |
| Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0/11556 = 0.0%<br>(0.0%, 0.0%)       | 0/11556 = 0.0%<br>(0.0%, 0.0%)        | 0/11556 = 0.0%<br>(0.0%, 0.0%)       |
| Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 139 | 38.2/1183 = 3.2%<br>(1.3%, 7.7%)     | 104.4/1183 = 8.8%<br>(5.4%, 14.2%)    | 43.7/1183 = 3.7%<br>(1.6%, 8.2%)     |
| Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 139 | 443.4/1183 = 37.5%<br>(29.4%, 46.3%) | 544.8/1183 = 46.1%<br>(37.4%, 54.9%)  | 319.6/1183 = 27.0%<br>(21.0%, 34.0%) |
| Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 139 | 337.5/1183 = 28.5%<br>(21.6%, 36.6%) | 643.6/1183 = 54.4%<br>(45.2%, 63.4%)  | 435.2/1183 = 36.8%<br>(29.0%, 45.3%) |

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 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        |
|--------------------------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| <b>Age, Risk for Severe Covid-19</b> |        |         |                     |                         |     |                                       |                                       |                                       |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 226 | 201.4/5064 = 4.0%<br>(2.0%, 7.8%)     | 534.7/5064 = 10.6%<br>(6.9%, 15.8%)   | 272.2/5064 = 5.4%<br>(2.9%, 9.8%)     |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 226 | 2039.2/5064 = 40.3%<br>(33.6%, 47.3%) | 2617.9/5064 = 51.7%<br>(44.8%, 58.6%) | 1773.5/5064 = 35.0%<br>(28.6%, 42.0%) |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 226 | 1953.3/5064 = 38.6%<br>(32.0%, 45.6%) | 3339.1/5064 = 65.9%<br>(59.1%, 72.2%) | 2540.4/5064 = 50.2%<br>(43.2%, 57.1%) |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 69  | 24.5/554 = 4.4%<br>(1.3%, 14.2%)      | 76.1/554 = 13.7%<br>(7.4%, 24.0%)     | 42/554 = 7.6%<br>(3.2%, 16.9%)        |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 373/554 = 67.3%<br>(55.0%, 77.6%)     | 413.9/554 = 74.7%<br>(62.9%, 83.7%)   | 309.4/554 = 55.9%<br>(43.5%, 67.5%)   |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 69  | 301.9/554 = 54.5%<br>(41.7%, 66.7%)   | 474.9/554 = 85.7%<br>(74.3%, 92.6%)   | 340.8/554 = 61.5%<br>(48.6%, 73.0%)   |
| Age 18 - 59 At-risk                  | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 26  | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 At-risk                  | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 26  | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 At-risk                  | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 26  | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 At-risk                  | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69  | 4.5/533 = 0.8%<br>(0.1%, 6.0%)        | 21.8/533 = 4.1%<br>(1.5%, 10.6%)      | 4.5/533 = 0.8%<br>(0.1%, 6.0%)        |
| Age 18 - 59 At-risk                  | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 114.5/533 = 21.5%<br>(12.6%, 34.2%)   | 217.3/533 = 40.8%<br>(28.6%, 54.2%)   | 80.7/533 = 15.1%<br>(8.0%, 26.7%)     |

(continued)

| Group                   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % Greater than 2 × LLOQ               | % Greater than 4 × LLOQ               |
|-------------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age 18 - 59 At-risk     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69  | 98.3/533 = 18.4%<br>(10.2%, 31.1%)    | 260.8/533 = 48.9%<br>(36.1%, 61.9%)   | 107.3/533 = 20.1%<br>(11.6%, 32.7%)   |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 100.3/7551 = 1.3%<br>(0.5%, 3.6%)     | 612.4/7551 = 8.1%<br>(5.3%, 12.2%)    | 246.6/7551 = 3.3%<br>(1.7%, 6.2%)     |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 3343.9/7551 = 44.3%<br>(37.5%, 51.3%) | 3737.1/7551 = 49.5%<br>(42.5%, 56.5%) | 2618.9/7551 = 34.7%<br>(28.3%, 41.7%) |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 2500.3/7551 = 33.1%<br>(26.9%, 40.0%) | 4955.5/7551 = 65.6%<br>(58.7%, 72.0%) | 3450.8/7551 = 45.7%<br>(38.8%, 52.7%) |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 72  | 57.4/826 = 6.9%<br>(2.7%, 16.6%)      | 160.2/826 = 19.4%<br>(11.3%, 31.2%)   | 103.7/826 = 12.6%<br>(6.4%, 23.2%)    |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 72  | 552/826 = 66.8%<br>(54.2%, 77.4%)     | 615.8/826 = 74.5%<br>(62.5%, 83.8%)   | 361.2/826 = 43.7%<br>(31.9%, 56.3%)   |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 72  | 413.4/826 = 50.1%<br>(37.5%, 62.6%)   | 679.8/826 = 82.3%<br>(70.4%, 90.1%)   | 490.4/826 = 59.4%<br>(46.6%, 71.0%)   |
| Age 18 - 59 Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 70  | 16.3/783 = 2.1%<br>(0.5%, 8.6%)       | 25.1/783 = 3.2%<br>(1.0%, 10.0%)      | 16.3/783 = 2.1%<br>(0.5%, 8.6%)       |
| Age 18 - 59 Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 201.6/783 = 25.8%<br>(16.4%, 38.1%)   | 258.2/783 = 33.0%<br>(22.4%, 45.6%)   | 112.6/783 = 14.4%<br>(8.7%, 22.9%)    |

(continued)

| Group                      | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % Greater than 2 × LLOQ               | % Greater than 4 × LLOQ               |
|----------------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age 18 - 59<br>Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 70  | 134/783 = 17.1%<br>(9.8%, 28.2%)      | 315.8/783 = 40.3%<br>(28.4%, 53.5%)   | 172.3/783 = 22.0%<br>(13.3%, 34.2%)   |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 228 | 395.3/2690 = 14.7%<br>(10.2%, 20.6%)  | 729.4/2690 = 27.1%<br>(21.3%, 33.8%)  | 480/2690 = 17.8%<br>(13.0%, 24.0%)    |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 228 | 2010.2/2690 = 74.7%<br>(68.3%, 80.3%) | 2279/2690 = 84.7%<br>(78.9%, 89.1%)   | 1819.7/2690 = 67.6%<br>(60.8%, 73.8%) |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 228 | 1879.4/2690 = 69.9%<br>(63.1%, 75.9%) | 2500.6/2690 = 93.0%<br>(88.5%, 95.8%) | 2084.7/2690 = 77.5%<br>(71.2%, 82.7%) |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 59.5/301 = 19.8%<br>(11.0%, 32.9%)    | 104.4/301 = 34.7%<br>(23.3%, 48.2%)   | 69.4/301 = 23.0%<br>(13.6%, 36.3%)    |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 264.2/301 = 87.8%<br>(76.5%, 94.1%)   | 271/301 = 90.0%<br>(78.7%, 95.7%)     | 247.1/301 = 82.1%<br>(69.9%, 90.1%)   |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 255.2/301 = 84.8%<br>(74.4%, 91.4%)   | 297.6/301 = 98.9%<br>(92.1%, 99.8%)   | 280.2/301 = 93.1%<br>(85.1%, 96.9%)   |
| Age ≥ 60<br>At-risk        | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 27  | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60<br>At-risk        | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 27  | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60<br>At-risk        | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 27  | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60<br>At-risk        | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 72  | 18.8/263 = 7.2%<br>(2.8%, 17.2%)      | 77.4/263 = 29.4%<br>(18.6%, 43.2%)    | 28.3/263 = 10.8%<br>(4.8%, 22.3%)     |
| Age ≥ 60<br>At-risk        | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 72  | 195.2/263 = 74.2%<br>(60.7%, 84.3%)   | 219.2/263 = 83.3%<br>(70.7%, 91.2%)   | 178.2/263 = 67.8%<br>(54.1%, 79.0%)   |

(continued)

| Group                | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % Greater than 2 × LLOQ               | % Greater than 4 × LLOQ               |
|----------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age ≥ 60 At-risk     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 72  | 200.9/263 = 76.4%<br>(63.9%, 85.5%)   | 252.2/263 = 95.9%<br>(85.9%, 98.9%)   | 209.8/263 = 79.8%<br>(67.3%, 88.3%)   |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 232 | 450.9/3987 = 11.3%<br>(7.8%, 16.2%)   | 1128.6/3987 = 28.3%<br>(22.4%, 35.0%) | 610.3/3987 = 15.3%<br>(11.1%, 20.8%)  |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 232 | 3102.5/3987 = 77.8%<br>(71.4%, 83.1%) | 3338.4/3987 = 83.7%<br>(77.9%, 88.3%) | 2810.2/3987 = 70.5%<br>(63.7%, 76.5%) |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 232 | 2892.6/3987 = 72.6%<br>(65.9%, 78.3%) | 3754.2/3987 = 94.2%<br>(90.3%, 96.5%) | 3251.1/3987 = 81.5%<br>(75.6%, 86.3%) |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 80.7/421 = 19.2%<br>(11.3%, 30.7%)    | 151.3/421 = 35.9%<br>(25.2%, 48.3%)   | 94.3/421 = 22.4%<br>(13.9%, 34.0%)    |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 380/421 = 90.3%<br>(81.0%, 95.3%)     | 384.5/421 = 91.3%<br>(82.2%, 96.0%)   | 355.1/421 = 84.4%<br>(73.4%, 91.3%)   |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 339.9/421 = 80.7%<br>(68.2%, 89.1%)   | 395/421 = 93.8%<br>(83.5%, 97.9%)     | 359.9/421 = 85.5%<br>(73.4%, 92.6%)   |
| Age ≥ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69  | 21.9/400 = 5.5%<br>(1.8%, 15.8%)      | 79.2/400 = 19.8%<br>(11.4%, 32.2%)    | 27.4/400 = 6.8%<br>(2.5%, 17.2%)      |
| Age ≥ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 241.8/400 = 60.4%<br>(46.6%, 72.8%)   | 286.6/400 = 71.7%<br>(57.8%, 82.4%)   | 207/400 = 51.7%<br>(38.5%, 64.8%)     |

(continued)

| Group                | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                           | % Greater than 2 ×LLOQ              | % Greater than 4 ×LLOQ              |
|----------------------|--------|---------|---------------------|-------------------------|----|-------------------------------------|-------------------------------------|-------------------------------------|
| Age ≥ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69 | 203.5/400 = 50.9%<br>(37.6%, 64.0%) | 327.8/400 = 82.0%<br>(68.9%, 90.3%) | 262.8/400 = 65.7%<br>(51.9%, 77.3%) |

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 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           |
|------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| <b>Sex</b> |        |         |                     |                         |     |  |  |  |
| Male       | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 416 | 550.9/8876.1 = 6.2%<br>(4.3%, 8.8%)      | 1423.2/8876.1 = 16.0%<br>(12.7%, 20.0%)  | 734.8/8876.1 = 8.3%<br>(6.0%, 11.3%)     |
| Male       | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 416 | 5007.8/8876.1 = 56.4%<br>(50.9%, 61.8%)  | 5685.6/8876.1 = 64.1%<br>(58.6%, 69.2%)  | 4315.9/8876.1 = 48.6%<br>(43.2%, 54.0%)  |
| Male       | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 416 | 4328.8/8876.1 = 48.8%<br>(43.4%, 54.2%)  | 6673.7/8876.1 = 75.2%<br>(70.0%, 79.8%)  | 5279.4/8876.1 = 59.5%<br>(54.0%, 64.7%)  |
| Male       | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 123 | 90.8/877.8 = 10.3%<br>(5.9%, 17.6%)      | 235.2/877.8 = 26.8%<br>(19.0%, 36.4%)    | 128.4/877.8 = 14.6%<br>(8.9%, 23.2%)     |
| Male       | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 123 | 672.9/877.8 = 76.7%<br>(67.0%, 84.1%)    | 702.9/877.8 = 80.1%<br>(70.8%, 86.9%)    | 569.7/877.8 = 64.9%<br>(54.7%, 73.9%)    |
| Male       | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 123 | 575.7/877.8 = 65.6%<br>(55.2%, 74.6%)    | 769.4/877.8 = 87.7%<br>(78.2%, 93.4%)    | 622.5/877.8 = 70.9%<br>(60.5%, 79.5%)    |
| Male       | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 55  | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         |
| Male       | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 55  | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         |
| Male       | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 55  | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         |
| Male       | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 126 | 32.1/899.8 = 3.6%<br>(1.4%, 8.6%)        | 93.2/899.8 = 10.4%<br>(6.3%, 16.6%)      | 41.5/899.8 = 4.6%<br>(2.1%, 9.7%)        |
| Male       | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 126 | 339.6/899.8 = 37.7%<br>(29.4%, 46.9%)    | 451.6/899.8 = 50.2%<br>(40.4%, 60.0%)    | 259.8/899.8 = 28.9%<br>(21.7%, 37.3%)    |
| Male       | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 126 | 239.7/899.8 = 26.6%<br>(19.5%, 35.3%)    | 558.1/899.8 = 62.0%<br>(51.5%, 71.6%)    | 310.9/899.8 = 34.6%<br>(26.2%, 44.0%)    |
| Female     | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 497 | 597/10415.9 = 5.7%<br>(4.1%, 8.0%)       | 1582/10415.9 = 15.2%<br>(12.2%, 18.7%)   | 874.2/10415.9 = 8.4%<br>(6.3%, 11.1%)    |
| Female     | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 497 | 5488/10415.9 = 52.7%<br>(47.7%, 57.6%)   | 6286.8/10415.9 = 60.4%<br>(55.4%, 65.1%) | 4706.4/10415.9 = 45.2%<br>(40.4%, 50.1%) |
| Female     | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 497 | 4896.9/10415.9 = 47.0%<br>(42.2%, 51.9%) | 7875.8/10415.9 = 75.6%<br>(70.9%, 79.8%) | 6047.5/10415.9 = 58.1%<br>(53.1%, 62.9%) |

(continued)

| Group  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                              | % Greater than 2 × LLOQ                 | % Greater than 4 × LLOQ                |
|--------|--------|---------|---------------------|-------------------------|-----|--|---|--|
| Female | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 160 | 131.2/1224.2 = 10.7%<br>(6.5%, 17.1%)  | 256.8/1224.2 = 21.0%<br>(15.1%, 28.5%)  | 180.9/1224.2 = 14.8%<br>(9.9%, 21.6%)  |
| Female | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 160 | 896.2/1224.2 = 73.2%<br>(64.5%, 80.5%) | 982.3/1224.2 = 80.2%<br>(72.2%, 86.4%)  | 703.1/1224.2 = 57.4%<br>(48.5%, 65.9%) |
| Female | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 160 | 734.8/1224.2 = 60.0%<br>(51.0%, 68.4%) | 1077.9/1224.2 = 88.1%<br>(80.8%, 92.8%) | 848.7/1224.2 = 69.3%<br>(60.4%, 77.0%) |
| Female | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 54  | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)        | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)         | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)        |
| Female | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 54  | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)        | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)         | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)        |
| Female | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 54  | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)        | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)         | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)        |
| Female | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 154 | 29.5/1079.2 = 2.7%<br>(1.1%, 6.5%)     | 110.3/1079.2 = 10.2%<br>(6.5%, 15.7%)   | 34.9/1079.2 = 3.2%<br>(1.4%, 7.2%)     |
| Female | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 154 | 413.5/1079.2 = 38.3%<br>(29.9%, 47.5%) | 529.6/1079.2 = 49.1%<br>(39.9%, 58.3%)  | 318.7/1079.2 = 29.5%<br>(22.8%, 37.3%) |
| Female | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 154 | 397/1079.2 = 36.8%<br>(28.9%, 45.4%)   | 598.5/1079.2 = 55.5%<br>(46.2%, 64.3%)  | 441.4/1079.2 = 40.9%<br>(32.8%, 49.6%) |

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 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          |
|--------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| <b>Age, sex</b>    |        |         |                     |                         |     |   |   |   |
| Age 18 - 59 Female | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 238 | 81/6678.1 = 1.2%<br>(0.4%, 3.3%)        | 588.5/6678.1 = 8.8%<br>(5.7%, 13.4%)    | 238.3/6678.1 = 3.6%<br>(1.8%, 6.9%)     |
| Age 18 - 59 Female | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 238 | 2658.5/6678.1 = 39.8%<br>(33.2%, 46.8%) | 3137.6/6678.1 = 47.0%<br>(40.1%, 54.0%) | 2104.1/6678.1 = 31.5%<br>(25.4%, 38.4%) |
| Age 18 - 59 Female | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 238 | 2259.2/6678.1 = 33.8%<br>(27.6%, 40.7%) | 4394.1/6678.1 = 65.8%<br>(59.0%, 72.0%) | 3084.9/6678.1 = 46.2%<br>(39.4%, 53.2%) |
| Age 18 - 59 Female | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 79  | 51.5/790.2 = 6.5%<br>(2.5%, 16.2%)      | 110.3/790.2 = 14.0%<br>(7.4%, 24.7%)    | 80/790.2 = 10.1%<br>(4.9%, 19.8%)       |
| Age 18 - 59 Female | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 79  | 509.5/790.2 = 64.5%<br>(52.2%, 75.1%)   | 587.7/790.2 = 74.4%<br>(62.9%, 83.2%)   | 350.5/790.2 = 44.4%<br>(32.6%, 56.7%)   |
| Age 18 - 59 Female | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 79  | 393.6/790.2 = 49.8%<br>(37.7%, 62.0%)   | 670.1/790.2 = 84.8%<br>(74.2%, 91.5%)   | 467.9/790.2 = 59.2%<br>(46.9%, 70.5%)   |
| Age 18 - 59 Female | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 23  | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Female | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 23  | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Female | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 23  | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Female | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 73  | 14.7/711.4 = 2.1%<br>(0.5%, 9.0%)       | 30/711.4 = 4.2%<br>(1.5%, 11.4%)        | 14.7/711.4 = 2.1%<br>(0.5%, 9.0%)       |
| Age 18 - 59 Female | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 73  | 181.6/711.4 = 25.5%<br>(15.6%, 38.8%)   | 257/711.4 = 36.1%<br>(24.7%, 49.3%)     | 114.9/711.4 = 16.2%<br>(9.3%, 26.6%)    |

(continued)

| Group              | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                               | % Greater than 2 × LLOQ                 | % Greater than 4 × LLOQ                 |
|--------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| Age 18 - 59 Female | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 73  | 157.7/711.4 = 22.2%<br>(13.5%, 34.2%)   | 273.7/711.4 = 38.5%<br>(27.1%, 51.3%)   | 172.4/711.4 = 24.2%<br>(15.2%, 36.4%)   |
| Age 18 - 59 Male   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 215 | 220.7/5936.9 = 3.7%<br>(1.9%, 7.2%)     | 558.6/5936.9 = 9.4%<br>(6.1%, 14.1%)    | 280.5/5936.9 = 4.7%<br>(2.6%, 8.6%)     |
| Age 18 - 59 Male   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 215 | 2724.6/5936.9 = 45.9%<br>(38.7%, 53.3%) | 3217.4/5936.9 = 54.2%<br>(46.9%, 61.4%) | 2288.3/5936.9 = 38.5%<br>(31.7%, 45.9%) |
| Age 18 - 59 Male   | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 215 | 2194.5/5936.9 = 37.0%<br>(30.2%, 44.3%) | 3900.5/5936.9 = 65.7%<br>(58.4%, 72.3%) | 2906.2/5936.9 = 49.0%<br>(41.7%, 56.2%) |
| Age 18 - 59 Male   | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 62  | 30.3/589.8 = 5.1%<br>(1.6%, 15.7%)      | 126/589.8 = 21.4%<br>(12.3%, 34.4%)     | 65.7/589.8 = 11.1%<br>(4.9%, 23.4%)     |
| Age 18 - 59 Male   | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 62  | 415.4/589.8 = 70.4%<br>(57.0%, 81.1%)   | 442/589.8 = 74.9%<br>(61.9%, 84.6%)     | 320.1/589.8 = 54.3%<br>(40.9%, 67.1%)   |
| Age 18 - 59 Male   | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 62  | 321.8/589.8 = 54.6%<br>(40.8%, 67.6%)   | 484.6/589.8 = 82.2%<br>(68.8%, 90.6%)   | 363.2/589.8 = 61.6%<br>(47.6%, 73.9%)   |
| Age 18 - 59 Male   | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 31  | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Male   | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 31  | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Male   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 31  | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Male   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 66  | 6.1/604.6 = 1.0%<br>(0.1%, 7.1%)        | 16.9/604.6 = 2.8%<br>(0.9%, 8.8%)       | 6.1/604.6 = 1.0%<br>(0.1%, 7.1%)        |
| Age 18 - 59 Male   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 66  | 134.6/604.6 = 22.3%<br>(14.0%, 33.5%)   | 218.5/604.6 = 36.1%<br>(24.6%, 49.6%)   | 78.4/604.6 = 13.0%<br>(7.2%, 22.2%)     |

(continued)

| Group            | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                               | % Greater than 2 × LLOQ                 | % Greater than 4 × LLOQ                 |
|------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| Age 18 - 59 Male | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 66  | 74.6/604.6 = 12.3%<br>(6.2%, 23.1%)     | 302.9/604.6 = 50.1%<br>(36.6%, 63.6%)   | 107.2/604.6 = 17.7%<br>(9.6%, 30.3%)    |
| Age ≥ 60 Female  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 259 | 516/3737.8 = 13.8%<br>(9.7%, 19.2%)     | 993.5/3737.8 = 26.6%<br>(21.2%, 32.8%)  | 635.9/3737.8 = 17.0%<br>(12.6%, 22.6%)  |
| Age ≥ 60 Female  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 259 | 2829.5/3737.8 = 75.7%<br>(69.6%, 80.9%) | 3149.2/3737.8 = 84.3%<br>(78.9%, 88.5%) | 2602.3/3737.8 = 69.6%<br>(63.2%, 75.3%) |
| Age ≥ 60 Female  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 259 | 2637.7/3737.8 = 70.6%<br>(64.3%, 76.2%) | 3481.7/3737.8 = 93.1%<br>(89.2%, 95.7%) | 2962.6/3737.8 = 79.3%<br>(73.5%, 84.0%) |
| Age ≥ 60 Female  | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 81  | 79.7/433.9 = 18.4%<br>(10.8%, 29.4%)    | 146.5/433.9 = 33.8%<br>(24.0%, 45.2%)   | 101/433.9 = 23.3%<br>(14.8%, 34.6%)     |
| Age ≥ 60 Female  | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 81  | 386.7/433.9 = 89.1%<br>(79.0%, 94.7%)   | 394.5/433.9 = 90.9%<br>(80.7%, 96.0%)   | 352.5/433.9 = 81.2%<br>(69.7%, 89.1%)   |
| Age ≥ 60 Female  | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 81  | 341.2/433.9 = 78.6%<br>(67.0%, 87.0%)   | 407.7/433.9 = 94.0%<br>(84.1%, 97.9%)   | 380.7/433.9 = 87.7%<br>(76.9%, 93.9%)   |
| Age ≥ 60 Female  | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 31  | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Female  | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 31  | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Female  | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 31  | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Female  | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 81  | 14.7/367.8 = 4.0%<br>(1.5%, 10.3%)      | 80.4/367.8 = 21.8%<br>(13.5%, 33.4%)    | 20.2/367.8 = 5.5%<br>(2.2%, 12.9%)      |
| Age ≥ 60 Female  | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 81  | 231.9/367.8 = 63.1%<br>(49.9%, 74.5%)   | 272.6/367.8 = 74.1%<br>(60.8%, 84.1%)   | 203.8/367.8 = 55.4%<br>(42.8%, 67.4%)   |

(continued)

| Group           | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                               | % Greater than 2 × LLOQ                 | % Greater than 4 × LLOQ                 |
|-----------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| Age ≥ 60 Female | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 81  | 239.3/367.8 = 65.1%<br>(52.2%, 76.0%)   | 324.9/367.8 = 88.3%<br>(76.5%, 94.6%)   | 269/367.8 = 73.1%<br>(60.4%, 82.9%)     |
| Age ≥ 60 Male   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 201 | 330.2/2939.2 = 11.2%<br>(7.6%, 16.4%)   | 864.6/2939.2 = 29.4%<br>(22.8%, 37.0%)  | 454.3/2939.2 = 15.5%<br>(10.8%, 21.6%)  |
| Age ≥ 60 Male   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 201 | 2283.2/2939.2 = 77.7%<br>(70.6%, 83.4%) | 2468.2/2939.2 = 84.0%<br>(77.3%, 88.9%) | 2027.6/2939.2 = 69.0%<br>(61.4%, 75.6%) |
| Age ≥ 60 Male   | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 201 | 2134.3/2939.2 = 72.6%<br>(65.2%, 79.0%) | 2773.1/2939.2 = 94.3%<br>(90.0%, 96.9%) | 2373.2/2939.2 = 80.7%<br>(74.1%, 86.0%) |
| Age ≥ 60 Male   | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 61  | 60.5/288.1 = 21.0%<br>(11.5%, 35.3%)    | 109.2/288.1 = 37.9%<br>(25.0%, 52.7%)   | 62.7/288.1 = 21.8%<br>(12.1%, 36.0%)    |
| Age ≥ 60 Male   | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 61  | 257.5/288.1 = 89.4%<br>(80.2%, 94.6%)   | 260.9/288.1 = 90.6%<br>(81.7%, 95.4%)   | 249.6/288.1 = 86.7%<br>(76.8%, 92.7%)   |
| Age ≥ 60 Male   | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 61  | 253.9/288.1 = 88.1%<br>(76.7%, 94.4%)   | 284.9/288.1 = 98.9%<br>(92.1%, 99.9%)   | 259.3/288.1 = 90.0%<br>(78.4%, 95.7%)   |
| Age ≥ 60 Male   | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 24  | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Male   | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 24  | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Male   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 24  | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Male   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 60  | 26/295.2 = 8.8%<br>(3.1%, 22.4%)        | 76.3/295.2 = 25.8%<br>(15.0%, 40.7%)    | 35.5/295.2 = 12.0%<br>(5.1%, 25.6%)     |
| Age ≥ 60 Male   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 60  | 205/295.2 = 69.5%<br>(54.1%, 81.4%)     | 233.2/295.2 = 79.0%<br>(64.4%, 88.6%)   | 181.4/295.2 = 61.5%<br>(46.2%, 74.7%)   |
| Age ≥ 60 Male   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 60  | 165.1/295.2 = 55.9%<br>(40.9%, 69.9%)   | 255.2/295.2 = 86.4%<br>(71.4%, 94.2%)   | 203.7/295.2 = 69.0%<br>(53.3%, 81.3%)   |

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 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           |
|-------------------------------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| <b>Hispanic or Latino ethnicity</b> |        |         |                     |                         |     |  |  |  |
| Hispanic or Latino                  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 374 | 539.6/10111.8 = 5.3%<br>(3.6%, 7.8%)     | 1493.4/10111.8 = 14.8%<br>(11.7%, 18.5%) | 769.4/10111.8 = 7.6%<br>(5.5%, 10.5%)    |
| Hispanic or Latino                  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 374 | 5689.2/10111.8 = 56.3%<br>(50.6%, 61.7%) | 6471.3/10111.8 = 64.0%<br>(58.4%, 69.2%) | 4960.6/10111.8 = 49.1%<br>(43.6%, 54.6%) |
| Hispanic or Latino                  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 374 | 4773.5/10111.8 = 47.2%<br>(41.9%, 52.6%) | 7648.8/10111.8 = 75.6%<br>(70.4%, 80.2%) | 6093.8/10111.8 = 60.3%<br>(54.7%, 65.6%) |
| Hispanic or Latino                  | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 106 | 75/993.9 = 7.5%<br>(3.6%, 15.1%)         | 166.5/993.9 = 16.8%<br>(10.2%, 26.2%)    | 96.2/993.9 = 9.7%<br>(4.9%, 18.2%)       |
| Hispanic or Latino                  | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 106 | 707.6/993.9 = 71.2%<br>(60.6%, 79.9%)    | 791/993.9 = 79.6%<br>(69.6%, 86.9%)      | 545.7/993.9 = 54.9%<br>(44.4%, 65.0%)    |
| Hispanic or Latino                  | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 106 | 610.1/993.9 = 61.4%<br>(50.5%, 71.3%)    | 891.2/993.9 = 89.7%<br>(80.3%, 94.9%)    | 695.1/993.9 = 69.9%<br>(59.1%, 78.9%)    |
| Hispanic or Latino                  | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 44  | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         |
| Hispanic or Latino                  | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 44  | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         |
| Hispanic or Latino                  | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 44  | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         |
| Hispanic or Latino                  | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 105 | 19.6/1003.3 = 1.9%<br>(0.5%, 6.7%)       | 100.6/1003.3 = 10.0%<br>(6.2%, 15.9%)    | 34.5/1003.3 = 3.4%<br>(1.4%, 8.1%)       |
| Hispanic or Latino                  | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 105 | 375.2/1003.3 = 37.4%<br>(28.3%, 47.5%)   | 524.4/1003.3 = 52.3%<br>(41.8%, 62.5%)   | 255.5/1003.3 = 25.5%<br>(18.9%, 33.4%)   |

(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) | 105 | 332.3/1003.3 = 33.1%<br>(24.7%, 42.8%)  | 553.3/1003.3 = 55.2%<br>(45.1%, 64.8%)  | 382.4/1003.3 = 38.1%<br>(29.4%, 47.6%)  |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 477 | 557.4/8055.6 = 6.9%<br>(5.0%, 9.5%)     | 1358.7/8055.6 = 16.9%<br>(13.6%, 20.7%) | 772.6/8055.6 = 9.6%<br>(7.2%, 12.7%)    |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 477 | 4275.6/8055.6 = 53.1%<br>(48.3%, 57.8%) | 4791.6/8055.6 = 59.5%<br>(54.6%, 64.2%) | 3606.1/8055.6 = 44.8%<br>(40.1%, 49.5%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 477 | 3945.2/8055.6 = 49.0%<br>(44.2%, 53.8%) | 6040.3/8055.6 = 75.0%<br>(70.4%, 79.1%) | 4553/8055.6 = 56.5%<br>(51.6%, 61.3%)   |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 164 | 147.1/1004.4 = 14.6%<br>(9.7%, 21.5%)   | 311.3/1004.4 = 31.0%<br>(23.8%, 39.2%)  | 213.1/1004.4 = 21.2%<br>(15.2%, 28.8%)  |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 164 | 793.6/1004.4 = 79.0%<br>(71.3%, 85.1%)  | 818.9/1004.4 = 81.5%<br>(74.2%, 87.2%)  | 683.4/1004.4 = 68.0%<br>(59.5%, 75.5%)  |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 164 | 656.1/1004.4 = 65.3%<br>(56.8%, 73.0%)  | 870.3/1004.4 = 86.6%<br>(79.3%, 91.7%)  | 714.1/1004.4 = 71.1%<br>(62.7%, 78.3%)  |
| Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         |
| Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         |
| Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         |
| Not Hispanic or Latino | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 152 | 38.2/801.6 = 4.8%<br>(2.2%, 10.1%)      | 89.3/801.6 = 11.1%<br>(6.9%, 17.5%)     | 38.2/801.6 = 4.8%<br>(2.2%, 10.1%)      |
| Not Hispanic or Latino | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 152 | 352.6/801.6 = 44.0%<br>(35.5%, 52.9%)   | 422.4/801.6 = 52.7%<br>(43.7%, 61.5%)   | 301.5/801.6 = 37.6%<br>(29.6%, 46.3%)   |

(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) | 152 | 284.7/801.6 = 35.5%<br>(28.0%, 43.8%) | 477.8/801.6 = 59.6%<br>(50.4%, 68.2%)  | 319/801.6 = 39.8%<br>(31.8%, 48.3%)    |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 62  | 50.9/1124.6 = 4.5%<br>(1.7%, 11.3%)   | 153.1/1124.6 = 13.6%<br>(7.1%, 24.5%)  | 67.1/1124.6 = 6.0%<br>(2.5%, 13.6%)    |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 62  | 531/1124.6 = 47.2%<br>(34.1%, 60.7%)  | 709.5/1124.6 = 63.1%<br>(48.4%, 75.7%) | 455.5/1124.6 = 40.5%<br>(28.3%, 54.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 62  | 507/1124.6 = 45.1%<br>(32.1%, 58.8%)  | 860.4/1124.6 = 76.5%<br>(62.1%, 86.6%) | 680/1124.6 = 60.5%<br>(46.1%, 73.2%)   |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 13  | 0/103.7 = 0.0%<br>(0.0%, 0.0%)        | 14.3/103.7 = 13.8%<br>(1.7%, 60.3%)    | 0/103.7 = 0.0%<br>(0.0%, 0.0%)         |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 13  | 68/103.7 = 65.5%<br>(15.6%, 95.1%)    | 75.2/103.7 = 72.5%<br>(16.2%, 97.3%)   | 43.7/103.7 = 42.2%<br>(8.0%, 85.9%)    |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 13  | 44.2/103.7 = 42.6%<br>(9.3%, 84.3%)   | 85.8/103.7 = 82.8%<br>(13.9%, 99.3%)   | 62.1/103.7 = 59.8%<br>(14.2%, 93.1%)   |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 9   | 0/1587 = 0.0%                         | 0/1587 = 0.0%                          | 0/1587 = 0.0%                          |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 9   | 0/1587 = 0.0%                         | 0/1587 = 0.0%                          | 0/1587 = 0.0%                          |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 9   | 0/1587 = 0.0%                         | 0/1587 = 0.0%                          | 0/1587 = 0.0%                          |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 23  | 3.8/174.1 = 2.2%<br>(0.2%, 17.4%)     | 13.7/174.1 = 7.8%<br>(2.4%, 23.0%)     | 3.8/174.1 = 2.2%<br>(0.2%, 17.4%)      |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 23  | 25.3/174.1 = 14.5%<br>(5.9%, 31.4%)   | 34.4/174.1 = 19.8%<br>(8.7%, 39.0%)    | 21.5/174.1 = 12.4%<br>(4.8%, 28.5%)    |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 23  | 19.7/174.1 = 11.3%<br>(4.0%, 27.8%)   | 125.5/174.1 = 72.1%<br>(45.9%, 88.7%)  | 51/174.1 = 29.3%<br>(11.2%, 57.6%)     |

(continued)

| Group | Visit | Arm | Baseline<br>SARS-CoV-2 | Marker | N | Responder | % Greater than<br>$2 \times \text{LLOQ}$ | % Greater than<br>$4 \times \text{LLOQ}$ |
|-------|-------|-----|------------------------|--------|---|-----------|--|--|
|-------|-------|-----|------------------------|--------|---|-----------|--|--|

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.

MOCK

Table 5h. 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          |
|--------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| <b>Race</b>        |        |         |                     |                         |     |   |   |   |
| White Non-Hispanic | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 196 | 322.7/3997.3 = 8.1%<br>(5.1%, 12.5%)    | 782.4/3997.3 = 19.6%<br>(14.4%, 26.0%)  | 481.8/3997.3 = 12.1%<br>(8.1%, 17.5%)   |
| White Non-Hispanic | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 196 | 2175.9/3997.3 = 54.4%<br>(47.0%, 61.7%) | 2476.6/3997.3 = 62.0%<br>(54.4%, 69.0%) | 1922.9/3997.3 = 48.1%<br>(40.8%, 55.5%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 196 | 1953/3997.3 = 48.9%<br>(41.5%, 56.2%)   | 3021/3997.3 = 75.6%<br>(68.3%, 81.6%)   | 2240.1/3997.3 = 56.0%<br>(48.5%, 63.3%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 63  | 92/475.6 = 19.3%<br>(10.8%, 32.2%)      | 158.3/475.6 = 33.3%<br>(22.1%, 46.8%)   | 132/475.6 = 27.8%<br>(17.4%, 41.2%)     |
| White Non-Hispanic | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 63  | 397.7/475.6 = 83.6%<br>(71.1%, 91.4%)   | 423/475.6 = 88.9%<br>(77.2%, 95.0%)     | 342.4/475.6 = 72.0%<br>(57.7%, 82.9%)   |
| White Non-Hispanic | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 63  | 327.4/475.6 = 68.8%<br>(55.1%, 79.9%)   | 428.8/475.6 = 90.2%<br>(77.7%, 96.0%)   | 338.8/475.6 = 71.2%<br>(57.6%, 81.8%)   |
| White Non-Hispanic | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 23  | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         |
| White Non-Hispanic | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 23  | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         |
| White Non-Hispanic | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 23  | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         |
| White Non-Hispanic | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 56  | 19.3/346.9 = 5.6%<br>(1.6%, 18.0%)      | 44.2/346.9 = 12.8%<br>(6.0%, 25.1%)     | 19.3/346.9 = 5.6%<br>(1.6%, 18.0%)      |
| White Non-Hispanic | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 56  | 153.1/346.9 = 44.1%<br>(30.6%, 58.6%)   | 178.3/346.9 = 51.4%<br>(37.1%, 65.4%)   | 128.2/346.9 = 36.9%<br>(24.5%, 51.4%)   |

(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) | 56  | 109/346.9 = 31.4%<br>(20.5%, 44.8%)     | 213/346.9 = 61.4%<br>(46.6%, 74.4%)     | 123.8/346.9 = 35.7%<br>(23.8%, 49.7%)   |
| Black or African American | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 332 | 302/5012.5 = 6.0%<br>(4.0%, 8.9%)       | 697.2/5012.5 = 13.9%<br>(10.6%, 18.0%)  | 379.4/5012.5 = 7.6%<br>(5.3%, 10.8%)    |
| Black or African American | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 332 | 2663.7/5012.5 = 53.1%<br>(47.4%, 58.8%) | 3060.8/5012.5 = 61.1%<br>(55.3%, 66.6%) | 2200.1/5012.5 = 43.9%<br>(38.4%, 49.6%) |
| Black or African American | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 332 | 2268.2/5012.5 = 45.3%<br>(39.6%, 51.0%) | 3778.3/5012.5 = 75.4%<br>(70.0%, 80.1%) | 2760.2/5012.5 = 55.1%<br>(49.2%, 60.8%) |
| Black or African American | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 111 | 51/600 = 8.5%<br>(4.9%, 14.3%)          | 137.9/600 = 23.0%<br>(15.9%, 32.1%)     | 69.9/600 = 11.7%<br>(7.2%, 18.4%)       |
| Black or African American | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 111 | 399.3/600 = 66.6%<br>(55.3%, 76.2%)     | 417.4/600 = 69.6%<br>(58.3%, 78.9%)     | 316.8/600 = 52.8%<br>(42.3%, 63.1%)     |
| Black or African American | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 111 | 346/600 = 57.7%<br>(46.6%, 68.0%)       | 494.8/600 = 82.5%<br>(71.2%, 89.9%)     | 408.1/600 = 68.0%<br>(56.8%, 77.5%)     |
| Black or African American | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 38  | 0/4983 = 0.0%<br>(0.0%, 0.0%)           | 0/4983 = 0.0%<br>(0.0%, 0.0%)           | 0/4983 = 0.0%<br>(0.0%, 0.0%)           |
| Black or African American | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 38  | 0/4983 = 0.0%<br>(0.0%, 0.0%)           | 0/4983 = 0.0%<br>(0.0%, 0.0%)           | 0/4983 = 0.0%<br>(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) | 38 | 0/4983 = 0.0%<br>(0.0%, 0.0%)         | 0/4983 = 0.0%<br>(0.0%, 0.0%)         | 0/4983 = 0.0%<br>(0.0%, 0.0%)         |
| Black or African American | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 94 | 17.5/474.5 = 3.7%<br>(1.4%, 9.6%)     | 65.5/474.5 = 13.8%<br>(7.9%, 23.1%)   | 22.9/474.5 = 4.8%<br>(2.0%, 11.4%)    |
| Black or African American | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 94 | 200.6/474.5 = 42.3%<br>(31.6%, 53.8%) | 228.4/474.5 = 48.1%<br>(37.0%, 59.5%) | 180.3/474.5 = 38.0%<br>(27.9%, 49.3%) |
| Black or African American | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 94 | 162.5/474.5 = 34.2%<br>(24.8%, 45.2%) | 249.4/474.5 = 52.6%<br>(40.9%, 64.0%) | 189.2/474.5 = 39.9%<br>(29.8%, 50.9%) |
| Asian                     | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 18 | 37.5/324.9 = 11.6%<br>(2.1%, 44.2%)   | 56.2/324.9 = 17.3%<br>(4.3%, 49.5%)   | 37.5/324.9 = 11.6%<br>(2.1%, 44.2%)   |
| Asian                     | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 18 | 171.6/324.9 = 52.8%<br>(23.8%, 80.0%) | 226.5/324.9 = 69.7%<br>(38.5%, 89.4%) | 160.2/324.9 = 49.3%<br>(21.0%, 78.1%) |
| Asian                     | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 18 | 113.5/324.9 = 34.9%<br>(13.4%, 65.0%) | 284.5/324.9 = 87.5%<br>(53.8%, 97.7%) | 228.5/324.9 = 70.3%<br>(39.3%, 89.7%) |
| Asian                     | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 5  | 0/32.2 = 0.0%                         | 0/32.2 = 0.0%                         | 0/32.2 = 0.0%                         |
| Asian                     | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 5  | 24.9/32.2 = 77.4%                     | 24.9/32.2 = 77.4%                     | 24.9/32.2 = 77.4%                     |
| Asian                     | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 5  | 20.1/32.2 = 62.3%                     | 32.2/32.2 = 100.0%                    | 20.1/32.2 = 62.3%                     |
| Asian                     | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0/258 = 0.0%                          | 0/258 = 0.0%                          | 0/258 = 0.0%                          |
| Asian                     | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0/258 = 0.0%                          | 0/258 = 0.0%                          | 0/258 = 0.0%                          |
| Asian                     | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0/258 = 0.0%                          | 0/258 = 0.0%                          | 0/258 = 0.0%                          |
| Asian                     | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 10 | 0/40.7 = 0.0%<br>(0.0%, 0.0%)         | 3.8/40.7 = 9.3%<br>(0.3%, 75.9%)      | 0/40.7 = 0.0%<br>(0.0%, 0.0%)         |
| Asian                     | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 10 | 8.3/40.7 = 20.5%<br>(1.8%, 78.4%)     | 19.8/40.7 = 48.7%<br>(8.0%, 91.2%)    | 3.8/40.7 = 9.3%<br>(0.3%, 75.9%)      |

(continued)

| Group                            | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                               | % Greater than 2 × LLOQ                 | % Greater than 4 × LLOQ                 |
|----------------------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| Asian                            | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 10  | 8.3/40.7 = 20.5%<br>(1.8%, 78.4%)       | 21.4/40.7 = 52.6%<br>(9.0%, 92.6%)      | 11/40.7 = 27.1%<br>(3.3%, 80.1%)        |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 149 | 233.5/5037.1 = 4.6%<br>(2.5%, 8.6%)     | 644.9/5037.1 = 12.8%<br>(8.8%, 18.2%)   | 316.2/5037.1 = 6.3%<br>(3.6%, 10.7%)    |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 149 | 2641.2/5037.1 = 52.4%<br>(43.9%, 60.8%) | 2981.2/5037.1 = 59.2%<br>(50.5%, 67.4%) | 2322.6/5037.1 = 46.1%<br>(37.9%, 54.6%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 149 | 2278.9/5037.1 = 45.2%<br>(37.1%, 53.6%) | 3659.6/5037.1 = 72.7%<br>(64.1%, 79.8%) | 2945.4/5037.1 = 58.5%<br>(49.8%, 66.7%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 49  | 68.3/561.8 = 12.2%<br>(5.4%, 25.2%)     | 127.8/561.8 = 22.8%<br>(12.5%, 37.8%)   | 86.2/561.8 = 15.4%<br>(7.2%, 29.8%)     |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 49  | 425.1/561.8 = 75.7%<br>(59.6%, 86.8%)   | 455.2/561.8 = 81.0%<br>(65.2%, 90.7%)   | 350.2/561.8 = 62.3%<br>(46.8%, 75.7%)   |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 49  | 346.8/561.8 = 61.7%<br>(46.1%, 75.3%)   | 480.4/561.8 = 85.5%<br>(70.2%, 93.7%)   | 382.6/561.8 = 68.1%<br>(52.3%, 80.6%)   |
| American Indian or Alaska Native | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 18  | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         |
| American Indian or Alaska Native | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 18  | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         |

(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 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 18 | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)       | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)       | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)       |
| American Indian or Alaska Native          | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 48 | 6.6/554.6 = 1.2%<br>(0.2%, 8.5%)      | 43.2/554.6 = 7.8%<br>(3.5%, 16.5%)    | 6.6/554.6 = 1.2%<br>(0.2%, 8.5%)      |
| American Indian or Alaska Native          | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 48 | 215.1/554.6 = 38.8%<br>(25.9%, 53.4%) | 287.4/554.6 = 51.8%<br>(36.8%, 66.5%) | 149.8/554.6 = 27.0%<br>(17.2%, 39.7%) |
| American Indian or Alaska Native          | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 48 | 176.9/554.6 = 31.9%<br>(20.6%, 45.8%) | 297/554.6 = 53.5%<br>(38.8%, 67.7%)   | 187/554.6 = 33.7%<br>(22.2%, 47.6%)   |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 2  | 0/45.4 = 0.0%                         | 0/45.4 = 0.0%                         | 0/45.4 = 0.0%                         |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 26.7/45.4 = 58.8%                     | 45.4/45.4 = 100.0%                    | 26.7/45.4 = 58.8%                     |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 2  | 26.7/45.4 = 58.8%                     | 45.4/45.4 = 100.0%                    | 45.4/45.4 = 100.0%                    |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 1  | 0/5.5 = 0.0%                          | 0/5.5 = 0.0%                          | 0/5.5 = 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 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 5.5/5.5 = 100.0%                      | 5.5/5.5 = 100.0%                       | 0/5.5 = 0.0%                          |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 1  | 5.5/5.5 = 100.0%                      | 5.5/5.5 = 100.0%                       | 5.5/5.5 = 100.0%                      |
| Multiracial                               | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 25 | 18.8/579.7 = 3.2%<br>(0.4%, 23.2%)    | 117.7/579.7 = 20.3%<br>(8.0%, 42.7%)   | 30.1/579.7 = 5.2%<br>(1.1%, 22.0%)    |
| Multiracial                               | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 25 | 366.1/579.7 = 63.2%<br>(40.0%, 81.5%) | 403.7/579.7 = 69.6%<br>(46.0%, 86.1%)  | 297.6/579.7 = 51.3%<br>(29.2%, 73.0%) |
| Multiracial                               | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 25 | 363.3/579.7 = 62.7%<br>(39.1%, 81.5%) | 451.3/579.7 = 77.8%<br>(52.9%, 91.6%)  | 376.9/579.7 = 65.0%<br>(41.0%, 83.2%) |
| Multiracial                               | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 9  | 0/77.7 = 0.0%<br>(0.0%, 0.0%)         | 14.2/77.7 = 18.3%<br>(1.6%, 75.5%)     | 7.1/77.7 = 9.2%<br>(0.3%, 76.3%)      |
| Multiracial                               | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 9  | 53.5/77.7 = 68.8%<br>(12.0%, 97.3%)   | 71.4/77.7 = 91.8%<br>(27.1%, 99.7%)    | 53.5/77.7 = 68.8%<br>(12.0%, 97.3%)   |
| Multiracial                               | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 9  | 39.2/77.7 = 50.5%<br>(8.7%, 91.7%)    | 77.7/77.7 = 100.0%<br>(100.0%, 100.0%) | 46.4/77.7 = 59.7%<br>(10.8%, 94.7%)   |
| Multiracial                               | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0/447.1 = 0.0%                        | 0/447.1 = 0.0%                         | 0/447.1 = 0.0%                        |
| Multiracial                               | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0/447.1 = 0.0%                        | 0/447.1 = 0.0%                         | 0/447.1 = 0.0%                        |
| Multiracial                               | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0/447.1 = 0.0%                        | 0/447.1 = 0.0%                         | 0/447.1 = 0.0%                        |
| Multiracial                               | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 15 | 10.1/90.7 = 11.2%<br>(0.7%, 70.1%)    | 15.6/90.7 = 17.2%<br>(2.3%, 64.5%)     | 10.1/90.7 = 11.2%<br>(0.7%, 70.1%)    |
| Multiracial                               | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 15 | 48.2/90.7 = 53.2%<br>(16.6%, 86.7%)   | 56/90.7 = 61.8%<br>(21.9%, 90.3%)      | 29/90.7 = 31.9%<br>(7.9%, 72.1%)      |
| Multiracial                               | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 15 | 35.3/90.7 = 39.0%<br>(10.4%, 77.8%)   | 62.4/90.7 = 68.8%<br>(26.6%, 93.1%)    | 35.3/90.7 = 39.0%<br>(10.4%, 77.8%)   |
| Not reported and unknown                  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 12 | 0/231.3 = 0.0%<br>(0.0%, 0.0%)        | 93.2/231.3 = 40.3%<br>(5.6%, 88.4%)    | 0/231.3 = 0.0%<br>(0.0%, 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 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 12 | 192.3/231.3 = 83.2%<br>(27.4%, 98.5%) | 192.3/231.3 = 83.2%<br>(27.4%, 98.5%) | 106.2/231.3 = 45.9%<br>(9.2%, 87.7%) |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 12 | 211/231.3 = 91.2%<br>(25.9%, 99.7%)   | 211/231.3 = 91.2%<br>(25.9%, 99.7%)   | 211/231.3 = 91.2%<br>(25.9%, 99.7%)  |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1  | 0/6.8 = 0.0%                          | 0/6.8 = 0.0%                          | 0/6.8 = 0.0%                         |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 6.8/6.8 = 100.0%                      | 6.8/6.8 = 100.0%                      | 6.8/6.8 = 100.0%                     |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 1  | 6.8/6.8 = 100.0%                      | 6.8/6.8 = 100.0%                      | 6.8/6.8 = 100.0%                     |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0/254 = 0.0%                          | 0/254 = 0.0%                          | 0/254 = 0.0%                         |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0/254 = 0.0%                          | 0/254 = 0.0%                          | 0/254 = 0.0%                         |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0/254 = 0.0%                          | 0/254 = 0.0%                          | 0/254 = 0.0%                         |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 4  | 1.4/28.3 = 4.9%                       | 1.4/28.3 = 4.9%                       | 1.4/28.3 = 4.9%                      |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 4  | 1.4/28.3 = 4.9%                       | 21.7/28.3 = 76.6%                     | 0/28.3 = 0.0%                        |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 4  | 28.3/28.3 = 100.0%                    | 28.3/28.3 = 100.0%                    | 28.3/28.3 = 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 concentrations  $\geq 2 \times$  LLOQ or  $\geq 4 \times$  LLOQ for binding antibody markers by Underrepresented Minority Status in the U.S.

| Group   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % Greater than $2 \times$ LLOQ        | % Greater than $4 \times$ LLOQ        |
|---|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| <b>Underrepresented Minority Status in the U.S.</b> |        |         |                     |                         |     |                                       |                                       |                                       |
| URM   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 187.6/3939 = 4.8%<br>(2.7%, 8.3%)     | 589.7/3939 = 15.0%<br>(10.8%, 20.4%)  | 252/3939 = 6.4%<br>(3.9%, 10.3%)      |
| URM   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 2041/3939 = 51.8%<br>(45.0%, 58.5%)   | 2449.3/3939 = 62.2%<br>(55.3%, 68.6%) | 1702.8/3939 = 43.2%<br>(36.8%, 49.9%) |
| URM   | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 1780.2/3939 = 45.2%<br>(38.8%, 51.7%) | 3007.6/3939 = 76.4%<br>(69.8%, 81.9%) | 2367.6/3939 = 60.1%<br>(53.2%, 66.6%) |
| URM   | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 19.1/459 = 4.2%<br>(1.7%, 9.7%)       | 77.9/459 = 17.0%<br>(9.5%, 28.4%)     | 22.5/459 = 4.9%<br>(2.2%, 10.5%)      |
| URM   | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 268.2/459 = 58.4%<br>(45.3%, 70.4%)   | 304.6/459 = 66.4%<br>(53.0%, 77.6%)   | 202.2/459 = 44.1%<br>(32.3%, 56.5%)   |
| URM   | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 266/459 = 57.9%<br>(45.0%, 69.9%)     | 380.7/459 = 82.9%<br>(69.8%, 91.1%)   | 295.1/459 = 64.3%<br>(51.1%, 75.6%)   |
| URM   | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         |
| URM   | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         |
| URM   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         |
| URM   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 70  | 5.7/418 = 1.4%<br>(0.3%, 5.3%)        | 45.1/418 = 10.8%<br>(5.7%, 19.5%)     | 14/418 = 3.3%<br>(1.2%, 9.1%)         |
| URM   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 164.3/418 = 39.3%<br>(28.5%, 51.2%)   | 193.7/418 = 46.3%<br>(34.9%, 58.2%)   | 136.5/418 = 32.6%<br>(23.1%, 43.9%)   |
| URM   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 70  | 130.5/418 = 31.2%<br>(22.2%, 41.9%)   | 227.4/418 = 54.4%<br>(43.0%, 65.4%)   | 155.7/418 = 37.3%<br>(27.7%, 47.9%)   |
| Non-URM   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 328.5/4659 = 7.1%<br>(4.5%, 10.9%)    | 846.6/4659 = 18.2%<br>(13.5%, 23.9%)  | 515.1/4659 = 11.1%<br>(7.6%, 15.8%)   |
| Non-URM   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 2499/4659 = 53.6%<br>(46.9%, 60.2%)   | 2819.5/4659 = 60.5%<br>(53.6%, 67.0%) | 2168.4/4659 = 46.5%<br>(40.0%, 53.2%) |

(continued)

| Group   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % Greater than 2 × LLOQ               | % Greater than 4 × LLOQ               |
|---------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Non-URM | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 2309.8/4659 = 49.6%<br>(42.8%, 56.3%) | 3506.3/4659 = 75.3%<br>(68.7%, 80.9%) | 2663.1/4659 = 57.2%<br>(50.2%, 63.9%) |
| Non-URM | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 82.9/519 = 16.0%<br>(8.7%, 27.5%)     | 174.5/519 = 33.6%<br>(23.0%, 46.3%)   | 130/519 = 25.1%<br>(15.7%, 37.5%)     |
| Non-URM | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 446.3/519 = 86.0%<br>(74.4%, 92.9%)   | 471.6/519 = 90.9%<br>(80.0%, 96.1%)   | 391/519 = 75.3%<br>(62.6%, 84.8%)     |
| Non-URM | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 355/519 = 68.4%<br>(55.5%, 79.0%)     | 472.2/519 = 91.0%<br>(79.6%, 96.3%)   | 373.4/519 = 72.0%<br>(59.2%, 82.0%)   |
| Non-URM | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         |
| Non-URM | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         |
| Non-URM | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         |
| Non-URM | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 71  | 23.1/439 = 5.3%<br>(1.7%, 14.9%)      | 51.8/439 = 11.8%<br>(6.0%, 21.8%)     | 23.1/439 = 5.3%<br>(1.7%, 14.9%)      |
| Non-URM | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 175.2/439 = 39.9%<br>(28.8%, 52.2%)   | 215.6/439 = 49.1%<br>(37.1%, 61.3%)   | 141.9/439 = 32.3%<br>(22.2%, 44.4%)   |
| Non-URM | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 71  | 138.7/439 = 31.6%<br>(22.2%, 42.8%)   | 267.3/439 = 60.9%<br>(48.1%, 72.3%)   | 161.1/439 = 36.7%<br>(26.5%, 48.3%)   |

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 concentrations  $\geq 2 \times$  LLOQ or  $\geq 4 \times$  LLOQ for binding antibody markers by Age, Underrepresented Minority Status in the U.S.

| Group  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                            | % Greater than $2 \times$ LLOQ        | % Greater than $4 \times$ LLOQ        |
|--|--------|---------|---------------------|-------------------------|-----|--------------------------------------|---------------------------------------|---------------------------------------|
| <b>Age, Underrepresented Minority Status in the U.S.</b> |        |         |                     |                         |     |                                      |                                       |                                       |
| Age 18 - 59 URM  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 113 | 64.1/2570 = 2.5%<br>(0.8%, 7.7%)     | 291.2/2570 = 11.3%<br>(6.6%, 18.9%)   | 90.8/2570 = 3.5%<br>(1.3%, 9.3%)      |
| Age 18 - 59 URM  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 113 | 1082/2570 = 42.1%<br>(33.1%, 51.7%)  | 1319.8/2570 = 51.4%<br>(41.9%, 60.7%) | 846.9/2570 = 33.0%<br>(24.7%, 42.4%)  |
| Age 18 - 59 URM  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 113 | 849.7/2570 = 33.1%<br>(24.9%, 42.3%) | 1744.5/2570 = 67.9%<br>(58.4%, 76.1%) | 1282.4/2570 = 49.9%<br>(40.5%, 59.3%) |
| Age 18 - 59 URM  | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 36  | 0/322 = 0.0%<br>(0.0%, 0.0%)         | 43.1/322 = 13.4%<br>(5.3%, 30.0%)     | 0/322 = 0.0%<br>(0.0%, 0.0%)          |
| Age 18 - 59 URM  | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 153.7/322 = 47.7%<br>(31.1%, 64.9%)  | 178.9/322 = 55.6%<br>(38.0%, 71.8%)   | 100.1/322 = 31.1%<br>(17.3%, 49.2%)   |
| Age 18 - 59 URM  | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 36  | 150.4/322 = 46.7%<br>(30.2%, 64.0%)  | 247.1/322 = 76.7%<br>(58.7%, 88.5%)   | 168.3/322 = 52.3%<br>(35.1%, 68.9%)   |
| Age 18 - 59 URM  | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0/2435 = 0.0%<br>(0.0%, 0.0%)        | 0/2435 = 0.0%<br>(0.0%, 0.0%)         | 0/2435 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 URM  | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0/2435 = 0.0%<br>(0.0%, 0.0%)        | 0/2435 = 0.0%<br>(0.0%, 0.0%)         | 0/2435 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 URM  | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0/2435 = 0.0%<br>(0.0%, 0.0%)        | 0/2435 = 0.0%<br>(0.0%, 0.0%)         | 0/2435 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 URM  | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 0/274 = 0.0%<br>(0.0%, 0.0%)         | 8.8/274 = 3.2%<br>(0.4%, 21.4%)       | 0/274 = 0.0%<br>(0.0%, 0.0%)          |
| Age 18 - 59 URM  | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 64.5/274 = 23.5%<br>(11.7%, 41.7%)   | 80.1/274 = 29.2%<br>(15.9%, 47.5%)    | 42.1/274 = 15.4%<br>(6.3%, 32.9%)     |

(continued)

| Group               | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % Greater than 2 × LLOQ               | % Greater than 4 × LLOQ               |
|---------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age 18 - 59 URM     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 33.3/274 = 12.1%<br>(4.4%, 29.4%)     | 88.9/274 = 32.4%<br>(18.4%, 50.6%)    | 42.1/274 = 15.4%<br>(6.3%, 32.9%)     |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 111 | 99.2/3065 = 3.2%<br>(1.2%, 8.6%)      | 386/3065 = 12.6%<br>(7.4%, 20.7%)     | 198.5/3065 = 6.5%<br>(3.0%, 13.3%)    |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 111 | 1246.2/3065 = 40.7%<br>(31.7%, 50.3%) | 1477.6/3065 = 48.2%<br>(38.8%, 57.8%) | 1025.5/3065 = 33.5%<br>(25.0%, 43.1%) |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 111 | 1168.7/3065 = 38.1%<br>(29.3%, 47.9%) | 2028.9/3065 = 66.2%<br>(56.7%, 74.5%) | 1444.3/3065 = 47.1%<br>(37.7%, 56.8%) |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 35  | 40.3/320 = 12.6%<br>(4.5%, 30.5%)     | 87.7/320 = 27.4%<br>(14.3%, 46.0%)    | 69.5/320 = 21.7%<br>(10.3%, 40.2%)    |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 258.4/320 = 80.7%<br>(63.0%, 91.2%)   | 283.7/320 = 88.6%<br>(71.5%, 96.0%)   | 214.1/320 = 66.9%<br>(48.4%, 81.4%)   |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 35  | 196/320 = 61.2%<br>(43.0%, 76.8%)     | 286.8/320 = 89.6%<br>(71.6%, 96.7%)   | 210.2/320 = 65.7%<br>(47.5%, 80.2%)   |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 10.2/289 = 3.5%<br>(0.4%, 23.2%)      | 23/289 = 8.0%<br>(2.3%, 23.9%)        | 10.2/289 = 3.5%<br>(0.4%, 23.2%)      |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 76.7/289 = 26.6%<br>(13.7%, 45.2%)    | 99.7/289 = 34.5%<br>(19.7%, 53.1%)    | 60.1/289 = 20.8%<br>(9.6%, 39.3%)     |

(continued)

| Group               | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                            | % Greater than 2 × LLOQ               | % Greater than 4 × LLOQ               |
|---------------------|--------|---------|---------------------|-------------------------|-----|--------------------------------------|---------------------------------------|---------------------------------------|
| Age 18 - 59 Non-URM | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 52.4/289 = 18.1%<br>(8.3%, 35.0%)    | 135.5/289 = 46.9%<br>(30.1%, 64.5%)   | 62.7/289 = 21.7%<br>(10.5%, 39.5%)    |
| Age ≥ 60 URM        | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 114 | 123.4/1369 = 9.0%<br>(4.8%, 16.2%)   | 298.4/1369 = 21.8%<br>(15.0%, 30.7%)  | 161.2/1369 = 11.8%<br>(6.9%, 19.5%)   |
| Age ≥ 60 URM        | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 114 | 959/1369 = 70.1%<br>(60.9%, 77.9%)   | 1129.5/1369 = 82.5%<br>(74.1%, 88.6%) | 855.8/1369 = 62.5%<br>(53.0%, 71.1%)  |
| Age ≥ 60 URM        | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 114 | 930.5/1369 = 68.0%<br>(58.6%, 76.1%) | 1263/1369 = 92.3%<br>(85.5%, 96.0%)   | 1085.2/1369 = 79.3%<br>(70.6%, 85.9%) |
| Age ≥ 60 URM        | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 35  | 19.1/137 = 13.9%<br>(5.6%, 30.8%)    | 34.8/137 = 25.4%<br>(13.1%, 43.4%)    | 22.5/137 = 16.4%<br>(7.2%, 33.3%)     |
| Age ≥ 60 URM        | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 114.5/137 = 83.6%<br>(66.7%, 92.8%)  | 125.8/137 = 91.8%<br>(76.0%, 97.5%)   | 102.2/137 = 74.6%<br>(56.6%, 86.9%)   |
| Age ≥ 60 URM        | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 35  | 115.6/137 = 84.4%<br>(68.6%, 93.0%)  | 133.6/137 = 97.5%<br>(83.1%, 99.7%)   | 126.8/137 = 92.6%<br>(79.0%, 97.6%)   |
| Age ≥ 60 URM        | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0/1335 = 0.0%<br>(0.0%, 0.0%)        | 0/1335 = 0.0%<br>(0.0%, 0.0%)         | 0/1335 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 URM        | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0/1335 = 0.0%<br>(0.0%, 0.0%)        | 0/1335 = 0.0%<br>(0.0%, 0.0%)         | 0/1335 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 URM        | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0/1335 = 0.0%<br>(0.0%, 0.0%)        | 0/1335 = 0.0%<br>(0.0%, 0.0%)         | 0/1335 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 URM        | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 5.7/144 = 3.9%<br>(0.9%, 15.0%)      | 36.2/144 = 25.2%<br>(13.1%, 42.9%)    | 14/144 = 9.7%<br>(3.3%, 25.3%)        |
| Age ≥ 60 URM        | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 99.8/144 = 69.3%<br>(50.1%, 83.6%)   | 113.6/144 = 78.9%<br>(59.9%, 90.4%)   | 94.4/144 = 65.5%<br>(46.5%, 80.6%)    |

(continued)

| Group            | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % Greater than 2 × LLOQ               | % Greater than 4 × LLOQ               |
|------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age ≥ 60 URM     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 97.2/144 = 67.5%<br>(48.4%, 82.1%)    | 138.5/144 = 96.2%<br>(75.5%, 99.5%)   | 113.6/144 = 78.9%<br>(59.9%, 90.4%)   |
| Age ≥ 60 Non-URM | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 116 | 229.4/1594 = 14.4%<br>(8.9%, 22.4%)   | 460.6/1594 = 28.9%<br>(21.1%, 38.1%)  | 316.6/1594 = 19.9%<br>(13.3%, 28.5%)  |
| Age ≥ 60 Non-URM | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 116 | 1252.8/1594 = 78.6%<br>(69.9%, 85.3%) | 1341.9/1594 = 84.2%<br>(76.0%, 89.9%) | 1142.9/1594 = 71.7%<br>(62.5%, 79.4%) |
| Age ≥ 60 Non-URM | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 116 | 1141.1/1594 = 71.6%<br>(62.5%, 79.2%) | 1477.5/1594 = 92.7%<br>(86.3%, 96.2%) | 1218.8/1594 = 76.5%<br>(67.7%, 83.4%) |
| Age ≥ 60 Non-URM | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 36  | 42.6/199 = 21.4%<br>(10.1%, 39.7%)    | 86.8/199 = 43.6%<br>(27.5%, 61.3%)    | 60.5/199 = 30.4%<br>(16.7%, 48.7%)    |
| Age ≥ 60 Non-URM | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 187.9/199 = 94.4%<br>(78.2%, 98.8%)   | 187.9/199 = 94.4%<br>(78.2%, 98.8%)   | 176.9/199 = 88.9%<br>(72.0%, 96.1%)   |
| Age ≥ 60 Non-URM | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 36  | 159/199 = 79.9%<br>(61.8%, 90.7%)     | 185.3/199 = 93.1%<br>(75.2%, 98.4%)   | 163.2/199 = 82.0%<br>(63.9%, 92.2%)   |
| Age ≥ 60 Non-URM | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Non-URM | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Non-URM | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Non-URM | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 36  | 12.9/150 = 8.6%<br>(2.6%, 24.8%)      | 28.8/150 = 19.2%<br>(9.0%, 36.3%)     | 12.9/150 = 8.6%<br>(2.6%, 24.8%)      |
| Age ≥ 60 Non-URM | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 98.4/150 = 65.6%<br>(48.1%, 79.7%)    | 115.9/150 = 77.3%<br>(59.7%, 88.6%)   | 81.8/150 = 54.5%<br>(37.6%, 70.4%)    |

(continued)

| Group               | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                          | % Greater than 2 ×LLOQ              | % Greater than 4 ×LLOQ             |
|---------------------|--------|---------|---------------------|-------------------------|----|------------------------------------|-------------------------------------|------------------------------------|
| Age ≥ 60<br>Non-URM | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 36 | 86.3/150 = 57.6%<br>(40.3%, 73.2%) | 131.8/150 = 87.9%<br>(71.5%, 95.4%) | 98.4/150 = 65.6%<br>(48.1%, 79.7%) |

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 5k. Percentage of responders, and participants with concentrations  $\geq 2 \times$  LLOQ or  $\geq 4 \times$  LLOQ for binding antibody markers by Country

| Group          | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                              | % Greater than $2 \times$ LLOQ          | % Greater than $4 \times$ LLOQ         |
|----------------|--------|---------|---------------------|-------------------------|-----|--|---|--|
| <b>Country</b> |        |         |                     |                         |     |  |   |  |
| United States  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 454 | 516.1/8598 = 6.0%<br>(4.2%, 8.4%)      | 1436.3/8598 = 16.7%<br>(13.5%, 20.6%)   | 767.1/8598 = 8.9%<br>(6.6%, 11.9%)     |
| United States  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 454 | 4540/8598 = 52.8%<br>(48.0%, 57.5%)    | 5268.8/8598 = 61.3%<br>(56.4%, 65.9%)   | 3871.2/8598 = 45.0%<br>(40.4%, 49.8%)  |
| United States  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 454 | 4090/8598 = 47.6%<br>(42.9%, 52.3%)    | 6513.9/8598 = 75.8%<br>(71.2%, 79.8%)   | 5030.7/8598 = 58.5%<br>(53.6%, 63.2%)  |
| United States  | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 142 | 102/978 = 10.4%<br>(6.3%, 16.9%)       | 252.4/978 = 25.8%<br>(19.0%, 34.1%)     | 152.5/978 = 15.6%<br>(10.4%, 22.7%)    |
| United States  | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 142 | 714.5/978 = 73.1%<br>(64.7%, 80.0%)    | 776.2/978 = 79.4%<br>(71.4%, 85.6%)     | 593.3/978 = 60.7%<br>(52.2%, 68.5%)    |
| United States  | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 142 | 620.9/978 = 63.5%<br>(54.5%, 71.6%)    | 852.9/978 = 87.2%<br>(79.4%, 92.4%)     | 668.5/978 = 68.4%<br>(59.4%, 76.1%)    |
| United States  | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0/8528 = 0.0%<br>(0.0%, 0.0%)          | 0/8528 = 0.0%<br>(0.0%, 0.0%)           | 0/8528 = 0.0%<br>(0.0%, 0.0%)          |
| United States  | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0/8528 = 0.0%<br>(0.0%, 0.0%)          | 0/8528 = 0.0%<br>(0.0%, 0.0%)           | 0/8528 = 0.0%<br>(0.0%, 0.0%)          |
| United States  | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0/8528 = 0.0%<br>(0.0%, 0.0%)          | 0/8528 = 0.0%<br>(0.0%, 0.0%)           | 0/8528 = 0.0%<br>(0.0%, 0.0%)          |
| United States  | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 28.8/857 = 3.4%<br>(1.3%, 8.1%)        | 96.9/857 = 11.3%<br>(7.1%, 17.4%)       | 37.1/857 = 4.3%<br>(2.0%, 9.2%)        |
| United States  | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 339.5/857 = 39.6%<br>(31.7%, 48.1%)    | 409.3/857 = 47.8%<br>(39.4%, 56.2%)     | 278.4/857 = 32.5%<br>(25.3%, 40.5%)    |
| United States  | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 269.2/857 = 31.4%<br>(24.7%, 39.0%)    | 494.7/857 = 57.7%<br>(49.3%, 65.8%)     | 316.8/857 = 37.0%<br>(29.8%, 44.7%)    |
| Argentina      | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 45  | 94.5/1628.6 = 5.8%<br>(2.1%, 15.2%)    | 234.2/1628.6 = 14.4%<br>(7.3%, 26.3%)   | 113.3/1628.6 = 7.0%<br>(2.8%, 16.4%)   |
| Argentina      | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 45  | 739.4/1628.6 = 45.4%<br>(30.8%, 60.8%) | 945.8/1628.6 = 58.1%<br>(42.0%, 72.6%)  | 686.4/1628.6 = 42.1%<br>(28.1%, 57.6%) |
| Argentina      | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 45  | 838.7/1628.6 = 51.5%<br>(36.2%, 66.6%) | 1204.1/1628.6 = 73.9%<br>(57.4%, 85.7%) | 874.1/1628.6 = 53.7%<br>(38.1%, 68.6%) |

(continued)

| Group     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                               | % Greater than 2 ×LLOQ                  | % Greater than 4 ×LLOQ                  |
|-----------|--------|---------|---------------------|-------------------------|----|---|---|---|
| Argentina | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 11 | 19.5/129.4 = 15.0%<br>(2.5%, 55.2%)     | 46.5/129.4 = 35.9%<br>(10.3%, 73.2%)    | 37.3/129.4 = 28.9%<br>(6.8%, 69.2%)     |
| Argentina | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 11 | 99.4/129.4 = 76.8%<br>(32.6%, 95.8%)    | 99.4/129.4 = 76.8%<br>(32.6%, 95.8%)    | 99.4/129.4 = 76.8%<br>(32.6%, 95.8%)    |
| Argentina | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 11 | 102.4/129.4 = 79.1%<br>(35.3%, 96.3%)   | 111.5/129.4 = 86.2%<br>(34.0%, 98.7%)   | 102.4/129.4 = 79.1%<br>(35.3%, 96.3%)   |
| Argentina | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 5  | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           |
| Argentina | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 5  | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           |
| Argentina | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 5  | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           |
| Argentina | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 16 | 0/203 = 0.0%<br>(0.0%, 0.0%)            | 6.6/203 = 3.3%<br>(0.4%, 24.3%)         | 0/203 = 0.0%<br>(0.0%, 0.0%)            |
| Argentina | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 16 | 75.1/203 = 37.0%<br>(14.7%, 66.6%)      | 89/203 = 43.8%<br>(19.1%, 72.1%)        | 36.6/203 = 18.0%<br>(6.6%, 40.6%)       |
| Argentina | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 16 | 63.1/203 = 31.1%<br>(11.6%, 60.7%)      | 105.7/203 = 52.1%<br>(24.8%, 78.2%)     | 82.4/203 = 40.6%<br>(16.8%, 69.8%)      |
| Brazil    | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 78 | 205/2605.6 = 7.9%<br>(4.0%, 14.9%)      | 515.8/2605.6 = 19.8%<br>(12.5%, 29.9%)  | 304.3/2605.6 = 11.7%<br>(6.5%, 20.1%)   |
| Brazil    | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 78 | 1713.3/2605.6 = 65.8%<br>(53.3%, 76.4%) | 1884.3/2605.6 = 72.3%<br>(59.9%, 82.1%) | 1388.9/2605.6 = 53.3%<br>(41.3%, 64.9%) |
| Brazil    | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 78 | 1283.9/2605.6 = 49.3%<br>(37.7%, 60.9%) | 1968/2605.6 = 75.5%<br>(63.1%, 84.8%)   | 1635.5/2605.6 = 62.8%<br>(50.5%, 73.6%) |
| Brazil    | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 29 | 7.3/338.2 = 2.2%<br>(0.3%, 15.3%)       | 31/338.2 = 9.2%<br>(3.3%, 23.0%)        | 7.3/338.2 = 2.2%<br>(0.3%, 15.3%)       |
| Brazil    | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 29 | 257.8/338.2 = 76.2%<br>(53.9%, 89.8%)   | 293.6/338.2 = 86.8%<br>(66.2%, 95.7%)   | 184.7/338.2 = 54.6%<br>(35.2%, 72.7%)   |
| Brazil    | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 29 | 219.5/338.2 = 64.9%<br>(43.6%, 81.5%)   | 296/338.2 = 87.5%<br>(65.7%, 96.3%)     | 256.9/338.2 = 75.9%<br>(54.0%, 89.4%)   |
| Brazil    | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 15 | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         |
| Brazil    | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 15 | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                               | % Greater than 2 ×LLOQ                  | % Greater than 4 ×LLOQ                  |
|----------|--------|---------|---------------------|-------------------------|----|---|---|---|
| Brazil   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 15 | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         |
| Brazil   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 30 | 6.6/358.5 = 1.8%<br>(0.2%, 13.2%)       | 40.1/358.5 = 11.2%<br>(4.4%, 25.6%)     | 6.6/358.5 = 1.8%<br>(0.2%, 13.2%)       |
| Brazil   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 30 | 97.5/358.5 = 27.2%<br>(14.8%, 44.6%)    | 168.5/358.5 = 47.0%<br>(28.6%, 66.2%)   | 66.9/358.5 = 18.7%<br>(9.2%, 34.1%)     |
| Brazil   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 30 | 99.4/358.5 = 27.7%<br>(14.9%, 45.7%)    | 214.6/358.5 = 59.9%<br>(39.5%, 77.3%)   | 129.7/358.5 = 36.2%<br>(21.8%, 53.6%)   |
| Chile    | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 13 | 72.9/356.4 = 20.5%<br>(5.2%, 54.6%)     | 139/356.4 = 39.0%<br>(15.2%, 69.6%)     | 91.7/356.4 = 25.7%<br>(7.9%, 58.3%)     |
| Chile    | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 13 | 202.9/356.4 = 56.9%<br>(26.3%, 83.1%)   | 221.6/356.4 = 62.2%<br>(29.7%, 86.5%)   | 202.9/356.4 = 56.9%<br>(26.3%, 83.1%)   |
| Chile    | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 13 | 231.4/356.4 = 64.9%<br>(31.9%, 88.0%)   | 321/356.4 = 90.1%<br>(46.7%, 98.9%)     | 266.8/356.4 = 74.9%<br>(39.4%, 93.2%)   |
| Chile    | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1  | 0/9.1 = 0.0%                            | 0/9.1 = 0.0%                            | 0/9.1 = 0.0%                            |
| Chile    | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0/9.1 = 0.0%                            | 0/9.1 = 0.0%                            | 0/9.1 = 0.0%                            |
| Chile    | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0/9.1 = 0.0%                            | 0/9.1 = 0.0%                            | 0/9.1 = 0.0%                            |
| Chile    | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0/430.3 = 0.0%                          | 0/430.3 = 0.0%                          | 0/430.3 = 0.0%                          |
| Chile    | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1  | 0/430.3 = 0.0%                          | 0/430.3 = 0.0%                          | 0/430.3 = 0.0%                          |
| Chile    | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1  | 0/430.3 = 0.0%                          | 0/430.3 = 0.0%                          | 0/430.3 = 0.0%                          |
| Chile    | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0/13.9 = 0.0%                           | 0/13.9 = 0.0%                           | 0/13.9 = 0.0%                           |
| Chile    | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 1  | 0/13.9 = 0.0%                           | 0/13.9 = 0.0%                           | 0/13.9 = 0.0%                           |
| Chile    | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0/13.9 = 0.0%                           | 0/13.9 = 0.0%                           | 0/13.9 = 0.0%                           |
| Chile    | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0/13.9 = 0.0%                           | 0/13.9 = 0.0%                           | 0/13.9 = 0.0%                           |
| Columbia | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 64 | 37.5/2092.3 = 1.8%<br>(0.4%, 7.1%)      | 167.5/2092.3 = 8.0%<br>(3.7%, 16.6%)    | 66/2092.3 = 3.2%<br>(1.0%, 9.9%)        |
| Columbia | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 64 | 1162.5/2092.3 = 55.6%<br>(42.0%, 68.3%) | 1309.1/2092.3 = 62.6%<br>(48.7%, 74.6%) | 944.2/2092.3 = 45.1%<br>(32.5%, 58.5%)  |
| Columbia | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 64 | 820.6/2092.3 = 39.2%<br>(27.5%, 52.3%)  | 1585.6/2092.3 = 75.8%<br>(61.6%, 85.9%) | 1175.7/2092.3 = 56.2%<br>(42.8%, 68.7%) |
| Columbia | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 20 | 36.1/250.4 = 14.4%<br>(3.9%, 41.2%)     | 54/250.4 = 21.6%<br>(7.2%, 49.4%)       | 36.1/250.4 = 14.4%<br>(3.9%, 41.2%)     |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                             | % Greater than 2 × LLOQ               | % Greater than 4 × LLOQ               |
|----------|--------|---------|---------------------|-------------------------|----|---------------------------------------|---------------------------------------|---------------------------------------|
| Columbia | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 20 | 202.5/250.4 = 80.9%<br>(51.6%, 94.4%) | 214.7/250.4 = 85.7%<br>(54.9%, 96.7%) | 154.5/250.4 = 61.7%<br>(35.9%, 82.3%) |
| Columbia | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 20 | 103.2/250.4 = 41.2%<br>(20.9%, 65.0%) | 232.5/250.4 = 92.9%<br>(58.6%, 99.2%) | 148.1/250.4 = 59.1%<br>(34.4%, 80.0%) |
| Columbia | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 3  | 0/796.6 = 0.0%                        | 0/796.6 = 0.0%                        | 0/796.6 = 0.0%                        |
| Columbia | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 3  | 0/796.6 = 0.0%                        | 0/796.6 = 0.0%                        | 0/796.6 = 0.0%                        |
| Columbia | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 3  | 0/796.6 = 0.0%                        | 0/796.6 = 0.0%                        | 0/796.6 = 0.0%                        |
| Columbia | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 13 | 10.1/176.2 = 5.7%<br>(0.6%, 39.3%)    | 16.7/176.2 = 9.5%<br>(1.7%, 38.2%)    | 10.1/176.2 = 5.7%<br>(0.6%, 39.3%)    |
| Columbia | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 13 | 54.6/176.2 = 31.0%<br>(10.8%, 62.5%)  | 99.1/176.2 = 56.2%<br>(26.8%, 81.9%)  | 54.6/176.2 = 31.0%<br>(10.8%, 62.5%)  |
| Columbia | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 13 | 61.2/176.2 = 34.7%<br>(13.0%, 65.5%)  | 88.9/176.2 = 50.5%<br>(23.1%, 77.6%)  | 61.2/176.2 = 34.7%<br>(13.0%, 65.5%)  |
| Mexico   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 9  | 0/331.2 = 0.0%<br>(0.0%, 0.0%)        | 28.5/331.2 = 8.6%<br>(0.6%, 59.3%)    | 0/331.2 = 0.0%<br>(0.0%, 0.0%)        |
| Mexico   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 9  | 153.3/331.2 = 46.3%<br>(12.1%, 84.3%) | 153.3/331.2 = 46.3%<br>(12.1%, 84.3%) | 153.3/331.2 = 46.3%<br>(12.1%, 84.3%) |
| Mexico   | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 9  | 153.3/331.2 = 46.3%<br>(12.1%, 84.3%) | 260.4/331.2 = 78.6%<br>(31.4%, 96.7%) | 206.3/331.2 = 62.3%<br>(22.0%, 90.6%) |
| Mexico   | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 4  | 7.3/38.9 = 18.7%<br>(0.2%, 97.2%)     | 7.3/38.9 = 18.7%<br>(0.2%, 97.2%)     | 7.3/38.9 = 18.7%<br>(0.2%, 97.2%)     |
| Mexico   | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 4  | 26.8/38.9 = 68.7%<br>(1.3%, 99.7%)    | 26.8/38.9 = 68.7%<br>(1.3%, 99.7%)    | 14.6/38.9 = 37.5%<br>(0.9%, 97.5%)    |
| Mexico   | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 4  | 26.8/38.9 = 68.7%<br>(1.3%, 99.7%)    | 26.8/38.9 = 68.7%<br>(1.3%, 99.7%)    | 26.8/38.9 = 68.7%<br>(1.3%, 99.7%)    |
| Mexico   | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0/347.2 = 0.0%                        | 0/347.2 = 0.0%                        | 0/347.2 = 0.0%                        |
| Mexico   | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1  | 0/347.2 = 0.0%                        | 0/347.2 = 0.0%                        | 0/347.2 = 0.0%                        |
| Mexico   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1  | 0/347.2 = 0.0%                        | 0/347.2 = 0.0%                        | 0/347.2 = 0.0%                        |
| Mexico   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 5  | 0/69.2 = 0.0%                         | 0/69.2 = 0.0%                         | 0/69.2 = 0.0%                         |
| Mexico   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 5  | 36/69.2 = 52.1%                       | 36/69.2 = 52.1%                       | 16.7/69.2 = 24.2%                     |
| Mexico   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5  | 6.6/69.2 = 9.6%                       | 55.3/69.2 = 79.9%                     | 6.6/69.2 = 9.6%                       |

(continued)

| Group        | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                              | % Greater than 2 × LLOQ                | % Greater than 4 × LLOQ                |
|--------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| Peru         | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 19  | 18.8/729 = 2.6%<br>(0.3%, 19.1%)       | 47.3/729 = 6.5%<br>(1.3%, 26.1%)       | 18.8/729 = 2.6%<br>(0.3%, 19.1%)       |
| Peru         | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 19  | 469.7/729 = 64.4%<br>(37.4%, 84.6%)    | 469.7/729 = 64.4%<br>(37.4%, 84.6%)    | 469.7/729 = 64.4%<br>(37.4%, 84.6%)    |
| Peru         | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 19  | 434.3/729 = 59.6%<br>(33.5%, 81.2%)    | 575.7/729 = 79.0%<br>(50.8%, 93.2%)    | 575.7/729 = 79.0%<br>(50.8%, 93.2%)    |
| Peru         | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 6   | 14.6/62.9 = 23.2%<br>(0.7%, 92.5%)     | 14.6/62.9 = 23.2%<br>(0.7%, 92.5%)     | 14.6/62.9 = 23.2%<br>(0.7%, 92.5%)     |
| Peru         | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 6   | 62.9/62.9 = 100.0%<br>(100.0%, 100.0%) | 62.9/62.9 = 100.0%<br>(100.0%, 100.0%) | 53.8/62.9 = 85.5%<br>(4.6%, 99.9%)     |
| Peru         | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 6   | 62.9/62.9 = 100.0%<br>(100.0%, 100.0%) | 62.9/62.9 = 100.0%<br>(100.0%, 100.0%) | 62.9/62.9 = 100.0%<br>(100.0%, 100.0%) |
| Peru         | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1   | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         |
| Peru         | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1   | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         |
| Peru         | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1   | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         |
| Peru         | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 5   | 0/49.2 = 0.0%<br>(0.0%, 0.0%)          | 6.6/49.2 = 13.4%<br>(0.1%, 95.7%)      | 6.6/49.2 = 13.4%<br>(0.1%, 95.7%)      |
| Peru         | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 5   | 23.3/49.2 = 47.4%<br>(1.3%, 98.4%)     | 29.9/49.2 = 60.8%<br>(1.3%, 99.5%)     | 13.2/49.2 = 26.9%<br>(0.6%, 95.5%)     |
| Peru         | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5   | 29.9/49.2 = 60.8%<br>(1.3%, 99.5%)     | 29.9/49.2 = 60.8%<br>(1.3%, 99.5%)     | 29.9/49.2 = 60.8%<br>(1.3%, 99.5%)     |
| South Africa | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 231 | 203/2951 = 6.9%<br>(4.3%, 10.8%)       | 436.7/2951 = 14.8%<br>(10.8%, 19.9%)   | 247.8/2951 = 8.4%<br>(5.5%, 12.7%)     |
| South Africa | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 231 | 1514.8/2951 = 51.3%<br>(44.8%, 57.8%)  | 1719.7/2951 = 58.3%<br>(51.6%, 64.7%)  | 1305.8/2951 = 44.2%<br>(38.0%, 50.6%)  |
| South Africa | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 231 | 1373.6/2951 = 46.5%<br>(40.1%, 53.1%)  | 2120.7/2951 = 71.9%<br>(65.1%, 77.8%)  | 1562/2951 = 52.9%<br>(46.3%, 59.5%)    |
| South Africa | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 70  | 35.3/295 = 12.0%<br>(6.3%, 21.7%)      | 86.3/295 = 29.3%<br>(19.6%, 41.3%)     | 54.2/295 = 18.4%<br>(10.6%, 29.9%)     |
| South Africa | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 205.3/295 = 69.6%<br>(56.3%, 80.3%)    | 211.7/295 = 71.7%<br>(58.6%, 82.0%)    | 172.6/295 = 58.5%<br>(45.4%, 70.5%)    |

(continued)

| Group        | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                           | % Greater than 2 × LLOQ             | % Greater than 4 × LLOQ             |
|--------------|--------|---------|---------------------|-------------------------|----|-------------------------------------|-------------------------------------|-------------------------------------|
| South Africa | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 70 | 174.7/295 = 59.2%<br>(46.1%, 71.2%) | 264.7/295 = 89.7%<br>(78.7%, 95.4%) | 205.7/295 = 69.7%<br>(56.4%, 80.4%) |
| South Africa | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 27 | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       |
| South Africa | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 27 | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       |
| South Africa | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 27 | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       |
| South Africa | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69 | 16/252 = 6.4%<br>(2.2%, 16.8%)      | 36.6/252 = 14.5%<br>(8.0%, 25.0%)   | 16/252 = 6.4%<br>(2.2%, 16.8%)      |
| South Africa | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69 | 127.1/252 = 50.4%<br>(37.4%, 63.4%) | 149.4/252 = 59.3%<br>(46.0%, 71.4%) | 112.2/252 = 44.5%<br>(32.1%, 57.6%) |
| South Africa | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69 | 107.2/252 = 42.6%<br>(30.3%, 55.8%) | 167.4/252 = 66.4%<br>(52.5%, 78.0%) | 125.7/252 = 49.9%<br>(36.9%, 62.9%) |

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 5l. Percentage of responders, and participants with concentrations  $\geq 2 \times$  LLOQ or  $\geq 4 \times$  LLOQ for binding antibody markers by HIV Infection

| Group                | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                                | % Greater than $2 \times$ LLOQ            | % Greater than $4 \times$ LLOQ            |
|----------------------|--------|---------|---------------------|-------------------------|-----|--|---|---|
| <b>HIV Infection</b> |        |         |                     |                         |     |  |   |   |
| Negative             | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 848 | 1075.4/18035.1 = 6.0%<br>(4.6%, 7.6%)    | 2825.9/18035.1 = 15.7%<br>(13.4%, 18.3%)  | 1529.4/18035.1 = 8.5%<br>(6.8%, 10.5%)    |
| Negative             | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 848 | 9909.2/18035.1 = 54.9%<br>(51.2%, 58.6%) | 11346.4/18035.1 = 62.9%<br>(59.2%, 66.5%) | 8466.2/18035.1 = 46.9%<br>(43.3%, 50.6%)  |
| Negative             | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 848 | 8785.2/18035.1 = 48.7%<br>(45.1%, 52.4%) | 13786/18035.1 = 76.4%<br>(73.0%, 79.6%)   | 10691.4/18035.1 = 59.3%<br>(55.5%, 62.9%) |
| Negative             | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 265 | 201.3/1980.7 = 10.2%<br>(7.0%, 14.6%)    | 457.7/1980.7 = 23.1%<br>(18.1%, 29.0%)    | 283.5/1980.7 = 14.3%<br>(10.4%, 19.4%)    |
| Negative             | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 265 | 1475.1/1980.7 = 74.5%<br>(68.0%, 80.0%)  | 1584.8/1980.7 = 80.0%<br>(73.9%, 85.0%)   | 1178.8/1980.7 = 59.5%<br>(52.9%, 65.8%)   |
| Negative             | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 265 | 1217.1/1980.7 = 61.4%<br>(54.6%, 67.9%)  | 1731.2/1980.7 = 87.4%<br>(81.7%, 91.5%)   | 1377.9/1980.7 = 69.6%<br>(62.8%, 75.6%)   |
| Negative             | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 100 | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)         | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          |
| Negative             | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 100 | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)         | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          |
| Negative             | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 100 | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)         | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          |
| Negative             | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 266 | 51.4/1886.3 = 2.7%<br>(1.4%, 5.2%)       | 190.7/1886.3 = 10.1%<br>(7.3%, 13.9%)     | 66.3/1886.3 = 3.5%<br>(2.0%, 6.1%)        |
| Negative             | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 266 | 722.7/1886.3 = 38.3%<br>(32.2%, 44.8%)   | 944.8/1886.3 = 50.1%<br>(43.4%, 56.8%)    | 554.2/1886.3 = 29.4%<br>(24.5%, 34.8%)    |
| Negative             | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 266 | 609/1886.3 = 32.3%<br>(26.8%, 38.3%)     | 1118.4/1886.3 = 59.3%<br>(52.4%, 65.9%)   | 724.6/1886.3 = 38.4%<br>(32.6%, 44.6%)    |
| Positive             | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 65  | 72.5/1256.9 = 5.8%<br>(2.2%, 14.3%)      | 179.2/1256.9 = 14.3%<br>(7.4%, 25.7%)     | 79.7/1256.9 = 6.3%<br>(2.6%, 14.7%)       |
| Positive             | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 65  | 586.6/1256.9 = 46.7%<br>(32.9%, 61.0%)   | 626.1/1256.9 = 49.8%<br>(35.7%, 63.9%)    | 556.1/1256.9 = 44.2%<br>(30.7%, 58.7%)    |
| Positive             | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 65  | 440.5/1256.9 = 35.0%<br>(23.1%, 49.1%)   | 763.4/1256.9 = 60.7%<br>(45.9%, 73.9%)    | 635.5/1256.9 = 50.6%<br>(36.4%, 64.6%)    |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                            | % Greater than 2 × LLOQ               | % Greater than 4 × LLOQ              |
|----------|--------|---------|---------------------|-------------------------|----|--------------------------------------|---------------------------------------|--------------------------------------|
| Positive | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 18 | 20.7/121.3 = 17.1%<br>(3.8%, 51.9%)  | 34.3/121.3 = 28.3%<br>(9.8%, 58.9%)   | 25.9/121.3 = 21.4%<br>(5.9%, 54.3%)  |
| Positive | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 18 | 94/121.3 = 77.5%<br>(46.3%, 93.2%)   | 100.3/121.3 = 82.7%<br>(50.5%, 95.7%) | 94/121.3 = 77.5%<br>(46.3%, 93.2%)   |
| Positive | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 18 | 93.4/121.3 = 77.0%<br>(41.7%, 94.0%) | 116.1/121.3 = 95.7%<br>(67.9%, 99.6%) | 93.4/121.3 = 77.0%<br>(41.7%, 94.0%) |
| Positive | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 9  | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)      | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)       | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)      |
| Positive | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 9  | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)      | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)       | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)      |
| Positive | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 9  | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)      | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)       | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)      |
| Positive | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 14 | 10.1/92.7 = 10.9%<br>(1.0%, 58.7%)   | 12.8/92.7 = 13.8%<br>(2.0%, 56.0%)    | 10.1/92.7 = 10.9%<br>(1.0%, 58.7%)   |
| Positive | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 14 | 30.4/92.7 = 32.8%<br>(9.8%, 68.6%)   | 36.4/92.7 = 39.3%<br>(12.7%, 74.2%)   | 24.3/92.7 = 26.2%<br>(7.0%, 62.7%)   |
| Positive | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 14 | 27.7/92.7 = 29.9%<br>(8.4%, 66.4%)   | 38.3/92.7 = 41.2%<br>(13.5%, 76.0%)   | 27.7/92.7 = 29.9%<br>(8.4%, 66.4%)   |

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.

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

Table 6a. 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                           |
|-------------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| <b>All participants</b> |        |         |                     |                         |     |   |   |   |
|                         | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 913 | 1147.9/19292 = 6.0%<br>(4.7%, 7.5%)     | 4910.8/19292 = 25.5%<br>(22.5%, 28.6%)  | 3005.2/19292 = 15.6%<br>(13.4%, 18.1%)  |
|                         | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 913 | 10495.8/19292 = 54.4%<br>(50.8%, 58.0%) | 15270.4/19292 = 79.2%<br>(76.0%, 82.0%) | 11972.4/19292 = 62.1%<br>(58.5%, 65.5%) |
|                         | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 913 | 9225.7/19292 = 47.8%<br>(44.3%, 51.3%)  | 16592.4/19292 = 86.0%<br>(83.1%, 88.5%) | 14549.4/19292 = 75.4%<br>(72.1%, 78.5%) |
|                         | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 283 | 222.1/2102 = 10.6%<br>(7.4%, 14.9%)     | 740.9/2102 = 35.2%<br>(29.4%, 41.6%)    | 492/2102 = 23.4%<br>(18.5%, 29.1%)      |
|                         | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 283 | 1569.2/2102 = 74.7%<br>(68.5%, 80.0%)   | 1873/2102 = 89.1%<br>(84.0%, 92.7%)     | 1685.1/2102 = 80.2%<br>(74.4%, 84.9%)   |
|                         | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 283 | 1310.4/2102 = 62.3%<br>(55.7%, 68.6%)   | 2004.5/2102 = 95.4%<br>(91.7%, 97.5%)   | 1847.3/2102 = 87.9%<br>(82.4%, 91.8%)   |
|                         | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 109 | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          |
|                         | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 109 | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          |
|                         | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 109 | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          | 0/19333 = 0.0%<br>(0.0%, 0.0%)          |
|                         | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 280 | 61.5/1979 = 3.1%<br>(1.6%, 5.8%)        | 399.9/1979 = 20.2%<br>(16.1%, 25.0%)    | 203.5/1979 = 10.3%<br>(7.5%, 14.0%)     |
|                         | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 280 | 753.1/1979 = 38.1%<br>(32.2%, 44.3%)    | 1300.3/1979 = 65.7%<br>(58.9%, 72.0%)   | 981.2/1979 = 49.6%<br>(43.1%, 56.0%)    |

|        |         |          |                         |     |                                      |                                     |                                       |
|--------|---------|----------|-------------------------|-----|--------------------------------------|-------------------------------------|---------------------------------------|
| Day 29 | Placebo | Positive | Anti Spike IgG (BAU/ml) | 280 | 636.7/1979 = 32.2%<br>(26.9%, 37.9%) | 1430/1979 = 72.3%<br>(65.5%, 78.1%) | 1156.6/1979 = 58.4%<br>(51.8%, 64.8%) |
|--------|---------|----------|-------------------------|-----|--------------------------------------|-------------------------------------|---------------------------------------|

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.

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Table 6b. 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                          |
|-------------|--------|---------|---------------------|-------------------------|-----|--|---|--|
| <b>Age</b>  |        |         |                     |                         |     |  |   |  |
| Age 18 - 59 | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 453 | 301.7/12615 = 2.4%<br>(1.4%, 4.2%)     | 2269.5/12615 = 18.0%<br>(14.5%, 22.1%)  | 1147.1/12615 = 9.1%<br>(6.7%, 12.2%)   |
| Age 18 - 59 | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 453 | 5383.1/12615 = 42.7%<br>(37.8%, 47.7%) | 9121.9/12615 = 72.3%<br>(67.7%, 76.5%)  | 6355/12615 = 50.4%<br>(45.4%, 55.4%)   |
| Age 18 - 59 | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 453 | 4453.6/12615 = 35.3%<br>(30.7%, 40.2%) | 10055.4/12615 = 79.7%<br>(75.3%, 83.5%) | 8294.6/12615 = 65.8%<br>(60.8%, 70.4%) |
| Age 18 - 59 | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 141 | 81.9/1380 = 5.9%<br>(2.8%, 12.0%)      | 373.5/1380 = 27.1%                      | 236.3/1380 = 17.1%<br>(11.4%, 24.9%)   |
| Age 18 - 59 | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 925/1380 = 67.0%<br>(58.2%, 74.8%)     | 1182.7/1380 = 85.7%<br>(78.3%, 90.9%)   | 1029.7/1380 = 74.6%<br>(66.3%, 81.5%)  |
| Age 18 - 59 | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 141 | 715.4/1380 = 51.8%<br>(42.7%, 60.8%)   | 1291.6/1380 = 93.6%<br>(88.2%, 96.6%)   | 1154.7/1380 = 83.7%<br>(75.7%, 89.4%)  |
| Age 18 - 59 | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 54  | 0/12512 = 0.0%<br>(0.0%, 0.0%)         | 0/12512 = 0.0%<br>(0.0%, 0.0%)          | 0/12512 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 54  | 0/12512 = 0.0%<br>(0.0%, 0.0%)         | 0/12512 = 0.0%<br>(0.0%, 0.0%)          | 0/12512 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 54  | 0/12512 = 0.0%<br>(0.0%, 0.0%)         | 0/12512 = 0.0%<br>(0.0%, 0.0%)          | 0/12512 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 139 | 20.8/1316 = 1.6%<br>(0.5%, 5.2%)       | 129.4/1316 = 9.8%<br>(6.0%, 15.7%)      | 46.9/1316 = 3.6%<br>(1.6%, 7.6%)       |
| Age 18 - 59 | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 139 | 316.1/1316 = 24.0%<br>(17.1%, 32.6%)   | 717.2/1316 = 54.5%<br>(45.1%, 63.6%)    | 475.4/1316 = 36.1%<br>(27.9%, 45.2%)   |
| Age 18 - 59 | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 139 | 232.3/1316 = 17.7%<br>(11.8%, 25.5%)   | 817.8/1316 = 62.1%<br>(52.7%, 70.7%)    | 576.6/1316 = 43.8%<br>(34.9%, 53.2%)   |
| Age ≥ 60    | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 460 | 846.2/6677 = 12.7%<br>(9.8%, 16.3%)    | 2641.4/6677 = 39.6%<br>(34.7%, 44.6%)   | 1858/6677 = 27.8%<br>(23.5%, 32.6%)    |
| Age ≥ 60    | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 460 | 5112.7/6677 = 76.6%<br>(72.1%, 80.5%)  | 6148.5/6677 = 92.1%<br>(88.9%, 94.4%)   | 5617.4/6677 = 84.1%<br>(80.1%, 87.5%)  |
| Age ≥ 60    | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 460 | 4772.1/6677 = 71.5%<br>(66.8%, 75.8%)  | 6537/6677 = 97.9%<br>(96.2%, 98.9%)     | 6254.8/6677 = 93.7%<br>(91.0%, 95.6%)  |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                           | % 2-Fold Rise                       | % 4-Fold Rise                       |
|----------|--------|---------|---------------------|-------------------------|-----|-------------------------------------|-------------------------------------|-------------------------------------|
| Age ≥ 60 | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 142 | 140.2/722 = 19.4%<br>(13.2%, 27.6%) | 367.4/722 = 50.9%<br>(41.9%, 59.9%) | 255.7/722 = 35.4%<br>(27.4%, 44.4%) |
| Age ≥ 60 | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 142 | 644.2/722 = 89.2%<br>(82.7%, 93.5%) | 690.3/722 = 95.6%<br>(90.1%, 98.1%) | 655.4/722 = 90.8%<br>(84.4%, 94.7%) |
| Age ≥ 60 | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 142 | 595.1/722 = 82.4%<br>(74.4%, 88.3%) | 712.9/722 = 98.7%<br>(91.4%, 99.8%) | 692.6/722 = 95.9%<br>(89.9%, 98.4%) |
| Age ≥ 60 | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 55  | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       |
| Age ≥ 60 | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 55  | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       |
| Age ≥ 60 | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 55  | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       | 0/6821 = 0.0%<br>(0.0%, 0.0%)       |
| Age ≥ 60 | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 40.7/663 = 6.1%<br>(2.9%, 12.4%)    | 270.5/663 = 40.8%<br>(32.0%, 50.3%) | 156.6/663 = 23.6%<br>(16.6%, 32.4%) |
| Age ≥ 60 | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 436.9/663 = 65.9%<br>(56.1%, 74.5%) | 583.1/663 = 87.9%<br>(79.7%, 93.1%) | 505.8/663 = 76.3%<br>(66.8%, 83.7%) |
| Age ≥ 60 | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 404.4/663 = 61.0%<br>(51.5%, 69.7%) | 612.1/663 = 92.3%<br>(84.4%, 96.4%) | 580/663 = 87.5%<br>(79.1%, 92.8%)   |

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 6c. 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                          |
|---------------------------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| <b>Risk for Severe Covid-19</b> |        |         |                     |                         |     |  |  |  |
| At-risk                         | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 454 | 596.8/7754 = 7.7%<br>(5.5%, 10.6%)     | 1831/7754 = 23.6%<br>(19.7%, 28.0%)    | 1264.2/7754 = 16.3%<br>(13.0%, 20.2%)  |
| At-risk                         | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 454 | 4049.4/7754 = 52.2%<br>(47.3%, 57.1%)  | 6287.2/7754 = 81.1%<br>(76.9%, 84.7%)  | 4897/7754 = 63.2%<br>(58.2%, 67.9%)    |
| At-risk                         | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 454 | 3832.8/7754 = 49.4%<br>(44.5%, 54.4%)  | 6662.1/7754 = 85.9%<br>(81.7%, 89.3%)  | 5839.7/7754 = 75.3%<br>(70.6%, 79.5%)  |
| At-risk                         | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 140 | 84/855 = 9.8%<br>(5.7%, 16.4%)         | 284.6/855 = 33.3%<br>(25.8%, 41.7%)    | 180.6/855 = 21.1%<br>(15.1%, 28.8%)    |
| At-risk                         | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 140 | 637.1/855 = 74.5%<br>(65.8%, 81.6%)    | 788.4/855 = 92.2%<br>(86.2%, 95.7%)    | 684.9/855 = 80.1%<br>(71.8%, 86.4%)    |
| At-risk                         | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 140 | 557.1/855 = 65.2%<br>(56.0%, 73.3%)    | 815.8/855 = 95.4%<br>(89.0%, 98.2%)    | 772.5/855 = 90.4%<br>(82.8%, 94.8%)    |
| At-risk                         | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 53  | 0/7777 = 0%<br>(0.0%, 0.0%)            | 0/7777 = 0%<br>(0.0%, 0.0%)            | 0/7777 = 0.0%<br>(0.0%, 0.0%)          |
| At-risk                         | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 53  | 0/7777 = 0%<br>(0.0%, 0.0%)            | 0/7777 = 0.0%<br>(0.0%, 0.0%)          | 0/7777 = 0.0%<br>(0.0%, 0.0%)          |
| At-risk                         | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 53  | 0/7777 = 0%<br>(0.0%, 0.0%)            | 0/7777 = 0.0%<br>(0.0%, 0.0%)          | 0/7777 = 0.0%<br>(0.0%, 0.0%)          |
| At-risk                         | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 23.3/796 = 2.9%<br>(1.3%, 6.7%)        | 207.9/796 = 26.1%<br>(19.3%, 34.3%)    | 99.2/796 = 12.5%<br>(8.3%, 18.3%)      |
| At-risk                         | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 309.6/796 = 38.9%<br>(30.9%, 47.5%)    | 570.4/796 = 71.7%<br>(61.9%, 79.7%)    | 436.4/796 = 54.8%<br>(45.4%, 63.9%)    |
| At-risk                         | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 299.2/796 = 37.6%<br>(30.0%, 45.8%)    | 649.7/796 = 81.6%<br>(72.5%, 88.2%)    | 513/796 = 64.5%<br>(55.0%, 72.9%)      |
| Not at-risk                     | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 459 | 551.2/11538 = 4.8%<br>(3.3%, 6.8%)     | 3079.8/11538 = 26.7%<br>(22.7%, 31.1%) | 1741/11538 = 15.1%<br>(12.2%, 18.5%)   |
| Not at-risk                     | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 459 | 6446.4/11538 = 55.9%<br>(50.8%, 60.8%) | 8983.2/11538 = 77.9%<br>(73.2%, 81.9%) | 7075.5/11538 = 61.3%<br>(56.3%, 66.1%) |
| Not at-risk                     | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 459 | 5392.9/11538 = 46.7%<br>(42.0%, 51.6%) | 9930.4/11538 = 86.1%<br>(81.9%, 89.4%) | 8709.8/11538 = 75.5%<br>(70.7%, 79.7%) |

(continued)

| Group       | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                            | % 2-Fold Rise                         | % 4-Fold Rise                         |
|-------------|--------|---------|---------------------|-------------------------|-----|--------------------------------------|---------------------------------------|---------------------------------------|
| Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 143 | 138.1/1247 = 11.1%<br>(6.8%, 17.5%)  | 456.3/1247 = 36.6%<br>(28.4%, 45.7%)  | 311.5/1247 = 25.0%<br>(18.2%, 33.3%)  |
| Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 143 | 932/1247 = 74.7%<br>(65.8%, 82.0%)   | 1084.7/1247 = 87.0%<br>(79.0%, 92.2%) | 1000.3/1247 = 80.2%<br>(71.8%, 86.6%) |
| Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 143 | 753.3/1247 = 60.4%<br>(51.0%, 69.1%) | 1188.7/1247 = 95.3%<br>(89.9%, 97.9%) | 1074.8/1247 = 86.2%<br>(77.9%, 91.7%) |
| Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0/11556 = 0.0%<br>(0.0%, 0.0%)       | 0/11556 = 0.0%<br>(0.0%, 0.0%)        | 0/11556 = 0.0%<br>(0.0%, 0.0%)        |
| Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0/11556 = 0.0%<br>(0.0%, 0.0%)       | 0/11556 = 0.0%<br>(0.0%, 0.0%)        | 0/11556 = 0.0%<br>(0.0%, 0.0%)        |
| Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0/11556 = 0.0%<br>(0.0%, 0.0%)       | 0/11556 = 0.0%<br>(0.0%, 0.0%)        | 0/11556 = 0.0%<br>(0.0%, 0.0%)        |
| Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 139 | 38.2/1183 = 3.2%<br>(1.3%, 7.7%)     | 192/1183 = 16.2%<br>(11.4%, 22.5%)    | 104.4/1183 = 8.8%<br>(5.4%, 14.2%)    |
| Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 139 | 443.4/1183 = 37.5%<br>(29.4%, 46.3%) | 729.9/1183 = 61.7%<br>(52.1%, 70.4%)  | 544.8/1183 = 46.1%<br>(37.4%, 54.9%)  |
| Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 139 | 337.5/1183 = 28.5%<br>(21.6%, 36.6%) | 780.3/1183 = 66.0%<br>(56.2%, 74.5%)  | 643.6/1183 = 54.4%<br>(45.2%, 63.4%)  |

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 6d. 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                         |
|--------------------------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| <b>Age, Risk for Severe Covid-19</b> |        |         |                     |                         |     |                                       |                                       |                                       |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 226 | 201.4/5064 = 4.0%<br>(2.0%, 7.8%)     | 820.5/5064 = 16.2%<br>(11.6%, 22.2%)  | 534.7/5064 = 10.6%<br>(6.9%, 15.8%)   |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 226 | 2039.2/5064 = 40.3%<br>(33.6%, 47.3%) | 3814/5064 = 75.3%<br>(69.3%, 80.5%)   | 2617.9/5064 = 51.7%<br>(44.8%, 58.6%) |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 226 | 1953.3/5064 = 38.6%<br>(32.0%, 45.6%) | 4035.1/5064 = 79.7%<br>(73.5%, 84.7%) | 3339.1/5064 = 65.9%<br>(59.1%, 72.2%) |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 69  | 24.5/554 = 4.4%<br>(1.3%, 14.2%)      | 136.3/554 = 24.6%<br>(15.9%, 36.0%)   | 76.1/554 = 13.7%<br>(7.4%, 24.0%)     |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 373/554 = 67.3%<br>(55.0%, 77.6%)     | 500.3/554 = 90.3%<br>(81.7%, 95.1%)   | 413.9/554 = 74.7%<br>(62.9%, 83.7%)   |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 69  | 301.9/554 = 54.5%<br>(41.7%, 66.7%)   | 514.8/554 = 92.9%<br>(83.2%, 97.2%)   | 474.9/554 = 85.7%<br>(74.3%, 92.6%)   |
| Age 18 - 59 At-risk                  | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 26  | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 At-risk                  | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 26  | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 At-risk                  | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 26  | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         | 0/5050 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 At-risk                  | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69  | 4.5/533 = 0.8%<br>(0.1%, 6.0%)        | 77.7/533 = 14.6%<br>(7.6%, 26.1%)     | 21.8/533 = 4.1%<br>(1.5%, 10.6%)      |
| Age 18 - 59 At-risk                  | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 114.5/533 = 21.5%<br>(12.6%, 34.2%)   | 335.2/533 = 62.9%<br>(49.4%, 74.6%)   | 217.3/533 = 40.8%<br>(28.6%, 54.2%)   |

(continued)

| Group                      | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % 2-Fold Rise                         | % 4-Fold Rise                         |
|----------------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age 18 - 59<br>At-risk     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69  | 98.3/533 = 18.4%<br>(10.2%, 31.1%)    | 388.1/533 = 72.8%<br>(59.7%, 82.9%)   | 260.8/533 = 48.9%<br>(36.1%, 61.9%)   |
| Age 18 - 59<br>Not at-risk | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 100.3/7551 = 1.3%<br>(0.5%, 3.6%)     | 1448.9/7551 = 19.2%<br>(14.4%, 25.1%) | 612.4/7551 = 8.1%<br>(5.3%, 12.2%)    |
| Age 18 - 59<br>Not at-risk | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 3343.9/7551 = 44.3%<br>(37.5%, 51.3%) | 5307.9/7551 = 70.3%<br>(63.6%, 76.2%) | 3737.1/7551 = 49.5%<br>(42.5%, 56.5%) |
| Age 18 - 59<br>Not at-risk | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 2500.3/7551 = 33.1%<br>(26.9%, 40.0%) | 6020.3/7551 = 79.7%<br>(73.4%, 84.8%) | 4955.5/7551 = 65.6%<br>(58.7%, 72.0%) |
| Age 18 - 59<br>Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 72  | 57.4/826 = 6.9%<br>(2.7%, 16.6%)      | 237.2/826 = 28.7%<br>(18.6%, 41.6%)   | 160.2/826 = 19.4%<br>(11.3%, 31.2%)   |
| Age 18 - 59<br>Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 72  | 552/826 = 66.8%<br>(54.2%, 77.4%)     | 682.4/826 = 82.6%<br>(70.9%, 90.3%)   | 615.8/826 = 74.5%<br>(62.5%, 83.8%)   |
| Age 18 - 59<br>Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 72  | 413.4/826 = 50.1%<br>(37.5%, 62.6%)   | 776.8/826 = 94.0%<br>(86.2%, 97.6%)   | 679.8/826 = 82.3%<br>(70.4%, 90.1%)   |
| Age 18 - 59<br>Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59<br>Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59<br>Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         | 0/7462 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59<br>Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 70  | 16.3/783 = 2.1%<br>(0.5%, 8.6%)       | 51.7/783 = 6.6%<br>(2.9%, 14.2%)      | 25.1/783 = 3.2%<br>(1.0%, 10.0%)      |
| Age 18 - 59<br>Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 201.6/783 = 25.8%<br>(16.4%, 38.1%)   | 382/783 = 48.8%<br>(36.0%, 61.7%)     | 258.2/783 = 33.0%<br>(22.4%, 45.6%)   |

(continued)

| Group                      | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % 2-Fold Rise                         | % 4-Fold Rise                         |
|----------------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age 18 - 59<br>Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 70  | 134/783 = 17.1%<br>(9.8%, 28.2%)      | 429.7/783 = 54.9%<br>(41.7%, 67.4%)   | 315.8/783 = 40.3%<br>(28.4%, 53.5%)   |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 228 | 395.3/2690 = 14.7%<br>(10.2%, 20.6%)  | 1010.4/2690 = 37.6%<br>(31.1%, 44.5%) | 729.4/2690 = 27.1%<br>(21.3%, 33.8%)  |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 228 | 2010.2/2690 = 74.7%<br>(68.3%, 80.3%) | 2473.2/2690 = 91.9%<br>(87.1%, 95.1%) | 2279/2690 = 84.7%<br>(78.9%, 89.1%)   |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 228 | 1879.4/2690 = 69.9%<br>(63.1%, 75.9%) | 2627/2690 = 97.7%<br>(94.3%, 99.1%)   | 2500.6/2690 = 93.0%<br>(88.5%, 95.8%) |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 59.5/301 = 19.8%<br>(11.0%, 32.9%)    | 148.3/301 = 49.3%<br>(36.4%, 62.2%)   | 104.4/301 = 34.7%<br>(23.3%, 48.2%)   |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 264.2/301 = 87.8%<br>(76.5%, 94.1%)   | 288.1/301 = 95.7%<br>(85.4%, 98.8%)   | 271/301 = 90.0%<br>(78.7%, 95.7%)     |
| Age ≥ 60<br>At-risk        | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 255.2/301 = 84.8%<br>(74.4%, 91.4%)   | 301/301 = 100.0%<br>(100.0%, 100.0%)  | 297.6/301 = 98.9%<br>(92.1%, 99.8%)   |
| Age ≥ 60<br>At-risk        | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 27  | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60<br>At-risk        | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 27  | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60<br>At-risk        | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 27  | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         | 0/2727 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60<br>At-risk        | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 72  | 18.8/263 = 7.2%<br>(2.8%, 17.2%)      | 130.2/263 = 49.5%<br>(36.3%, 62.8%)   | 77.4/263 = 29.4%<br>(18.6%, 43.2%)    |
| Age ≥ 60<br>At-risk        | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 72  | 195.2/263 = 74.2%<br>(60.7%, 84.3%)   | 235.2/263 = 89.4%<br>(77.8%, 95.3%)   | 219.2/263 = 83.3%<br>(70.7%, 91.2%)   |

(continued)

| Group                | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % 2-Fold Rise                         | % 4-Fold Rise                         |
|----------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age ≥ 60 At-risk     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 72  | 200.9/263 = 76.4%<br>(63.9%, 85.5%)   | 261.6/263 = 99.5%<br>(96.2%, 99.9%)   | 252.2/263 = 95.9%<br>(85.9%, 98.9%)   |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 232 | 450.9/3987 = 11.3%<br>(7.8%, 16.2%)   | 1630.9/3987 = 40.9%<br>(34.2%, 48.0%) | 1128.6/3987 = 28.3%<br>(22.4%, 35.0%) |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 232 | 3102.5/3987 = 77.8%<br>(71.4%, 83.1%) | 3675.3/3987 = 92.2%<br>(87.6%, 95.2%) | 3338.4/3987 = 83.7%<br>(77.9%, 88.3%) |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 232 | 2892.6/3987 = 72.6%<br>(65.9%, 78.3%) | 3910/3987 = 98.1%                     | 3754.2/3987 = 94.2%<br>(90.3%, 96.5%) |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 80.7/421 = 19.2%<br>(11.3%, 30.7%)    | 219.1/421 = 52.1%<br>(39.6%, 64.3%)   | 151.3/421 = 35.9%<br>(25.2%, 48.3%)   |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 380/421 = 90.3%<br>(81.0%, 95.3%)     | 402.2/421 = 95.5%<br>(86.9%, 98.6%)   | 384.5/421 = 91.3%<br>(82.2%, 96.0%)   |
| Age ≥ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 339.9/421 = 80.7%<br>(68.2%, 89.1%)   | 411.9/421 = 97.8%<br>(85.5%, 99.7%)   | 395/421 = 93.8%<br>(83.5%, 97.9%)     |
| Age ≥ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         | 0/4094 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69  | 21.9/400 = 5.5%<br>(1.8%, 15.8%)      | 140.4/400 = 35.1%<br>(23.7%, 48.5%)   | 79.2/400 = 19.8%<br>(11.4%, 32.2%)    |
| Age ≥ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 241.8/400 = 60.4%<br>(46.6%, 72.8%)   | 347.8/400 = 87.0%<br>(74.3%, 93.9%)   | 286.6/400 = 71.7%<br>(57.8%, 82.4%)   |

(continued)

| Group                     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                           | % 2-Fold Rise                       | % 4-Fold Rise                       |
|---------------------------|--------|---------|---------------------|-------------------------|----|-------------------------------------|-------------------------------------|-------------------------------------|
| Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69 | 203.5/400 = 50.9%<br>(37.6%, 64.0%) | 350.5/400 = 87.6%<br>(74.9%, 94.4%) | 327.8/400 = 82.0%<br>(68.9%, 90.3%) |

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 6e. 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                            |
|------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| <b>Sex</b> |        |         |                     |                         |     |  |  |  |
| Male       | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 416 | 550.9/8876.1 = 6.2%<br>(4.3%, 8.8%)      | 2145.5/8876.1 = 24.2%<br>(20.0%, 28.9%)  | 1423.2/8876.1 = 16.0%<br>(12.7%, 20.0%)  |
| Male       | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 416 | 5007.8/8876.1 = 56.4%<br>(50.9%, 61.8%)  | 6980.1/8876.1 = 78.6%<br>(73.6%, 82.9%)  | 5685.6/8876.1 = 64.1%<br>(58.6%, 69.2%)  |
| Male       | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 416 | 4328.8/8876.1 = 48.8%<br>(43.4%, 54.2%)  | 7617.1/8876.1 = 85.8%<br>(81.2%, 89.4%)  | 6673.7/8876.1 = 75.2%<br>(70.0%, 79.8%)  |
| Male       | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 123 | 90.8/877.8 = 10.3%<br>(5.9%, 17.6%)      | 357.9/877.8 = 40.8%<br>(31.5%, 50.7%)    | 235.2/877.8 = 26.8%<br>(19.0%, 36.4%)    |
| Male       | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 123 | 672.9/877.8 = 76.7%<br>(67.0%, 84.1%)    | 763.3/877.8 = 87.0%<br>(77.8%, 92.7%)    | 702.9/877.8 = 80.1%<br>(70.8%, 86.9%)    |
| Male       | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 123 | 575.7/877.8 = 65.6%<br>(55.2%, 74.6%)    | 835.3/877.8 = 95.2%<br>(88.5%, 98.0%)    | 769.4/877.8 = 87.7%<br>(78.2%, 93.4%)    |
| Male       | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 55  | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         |
| Male       | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 55  | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         |
| Male       | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 55  | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         | 0/11015.9 = 0.0%<br>(0.0%, 0.0%)         |
| Male       | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 126 | 32.1/899.8 = 3.6%<br>(1.4%, 8.6%)        | 188.9/899.8 = 21.0%<br>(14.7%, 29.1%)    | 93.2/899.8 = 10.4%<br>(6.3%, 16.6%)      |
| Male       | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 126 | 339.6/899.8 = 37.7%<br>(29.4%, 46.9%)    | 574.7/899.8 = 63.9%<br>(53.1%, 73.4%)    | 451.6/899.8 = 50.2%<br>(40.4%, 60.0%)    |
| Male       | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 126 | 239.7/899.8 = 26.6%<br>(19.5%, 35.3%)    | 665.8/899.8 = 74.0%<br>(63.3%, 82.4%)    | 558.1/899.8 = 62.0%<br>(51.5%, 71.6%)    |
| Female     | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 497 | 597/10415.9 = 5.7%<br>(4.1%, 8.0%)       | 2765.4/10415.9 = 26.5%<br>(22.5%, 31.0%) | 1582/10415.9 = 15.2%<br>(12.2%, 18.7%)   |
| Female     | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 497 | 5488/10415.9 = 52.7%<br>(47.7%, 57.6%)   | 8290.3/10415.9 = 79.6%<br>(75.2%, 83.4%) | 6286.8/10415.9 = 60.4%<br>(55.4%, 65.1%) |
| Female     | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 497 | 4896.9/10415.9 = 47.0%<br>(42.2%, 51.9%) | 8975.3/10415.9 = 86.2%<br>(82.0%, 89.5%) | 7875.8/10415.9 = 75.6%<br>(70.9%, 79.8%) |

(continued)

| Group  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                              | % 2-Fold Rise                           | % 4-Fold Rise                           |
|--------|--------|---------|---------------------|-------------------------|-----|--|---|---|
| Female | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 160 | 131.2/1224.2 = 10.7%<br>(6.5%, 17.1%)  | 383.1/1224.2 = 31.3%<br>(23.8%, 39.8%)  | 256.8/1224.2 = 21.0%<br>(15.1%, 28.5%)  |
| Female | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 160 | 896.2/1224.2 = 73.2%<br>(64.5%, 80.5%) | 1109.7/1224.2 = 90.7%<br>(84.0%, 94.7%) | 982.3/1224.2 = 80.2%<br>(72.2%, 86.4%)  |
| Female | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 160 | 734.8/1224.2 = 60.0%<br>(51.0%, 68.4%) | 1169.2/1224.2 = 95.5%<br>(90.1%, 98.0%) | 1077.9/1224.2 = 88.1%<br>(80.8%, 92.8%) |
| Female | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 54  | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)        | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)         | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)         |
| Female | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 54  | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)        | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)         | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)         |
| Female | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 54  | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)        | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)         | 0/8317.1 = 0.0%<br>(0.0%, 0.0%)         |
| Female | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 154 | 29.5/1079.2 = 2.7%<br>(1.1%, 6.5%)     | 211/1079.2 = 19.6%<br>(14.0%, 26.6%)    | 110.3/1079.2 = 10.2%<br>(6.5%, 15.7%)   |
| Female | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 154 | 413.5/1079.2 = 38.3%<br>(29.9%, 47.5%) | 725.6/1079.2 = 67.2%<br>(57.4%, 75.7%)  | 529.6/1079.2 = 49.1%<br>(39.9%, 58.3%)  |
| Female | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 154 | 397/1079.2 = 36.8%<br>(28.9%, 45.4%)   | 764.1/1079.2 = 70.8%<br>(61.0%, 79.0%)  | 598.5/1079.2 = 55.5%<br>(46.2%, 64.3%)  |

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 6f. 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                           |
|--------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| <b>Age, sex</b>    |        |         |                     |                         |     |   |   |   |
| Age 18 - 59 Female | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 238 | 81/6678.1 = 1.2%<br>(0.4%, 3.3%)        | 1247.4/6678.1 = 18.7%<br>(13.8%, 24.7%) | 588.5/6678.1 = 8.8%<br>(5.7%, 13.4%)    |
| Age 18 - 59 Female | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 238 | 2658.5/6678.1 = 39.8%<br>(33.2%, 46.8%) | 4822.6/6678.1 = 72.2%<br>(65.8%, 77.9%) | 3137.6/6678.1 = 47.0%<br>(40.1%, 54.0%) |
| Age 18 - 59 Female | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 238 | 2259.2/6678.1 = 33.8%<br>(27.6%, 40.7%) | 5316.6/6678.1 = 79.6%<br>(73.4%, 84.7%) | 4394.1/6678.1 = 65.8%<br>(59.0%, 72.0%) |
| Age 18 - 59 Female | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 79  | 51.5/790.2 = 6.5%<br>(2.5%, 16.2%)      | 189.7/790.2 = 24.0%<br>(15.0%, 36.1%)   | 110.3/790.2 = 14.0%<br>(7.4%, 24.7%)    |
| Age 18 - 59 Female | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 79  | 509.5/790.2 = 64.5%<br>(52.2%, 75.1%)   | 697.7/790.2 = 88.3%<br>(78.5%, 94.0%)   | 587.7/790.2 = 74.4%<br>(62.9%, 83.2%)   |
| Age 18 - 59 Female | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 79  | 393.6/790.2 = 49.8%<br>(37.7%, 62.0%)   | 744.4/790.2 = 94.2%<br>(86.3%, 97.7%)   | 670.1/790.2 = 84.8%<br>(74.2%, 91.5%)   |
| Age 18 - 59 Female | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 23  | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Female | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 23  | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Female | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 23  | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4732.7 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Female | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 73  | 14.7/711.4 = 2.1%<br>(0.5%, 9.0%)       | 66.5/711.4 = 9.4%<br>(4.5%, 18.6%)      | 30/711.4 = 4.2%<br>(1.5%, 11.4%)        |
| Age 18 - 59 Female | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 73  | 181.6/711.4 = 25.5%<br>(15.6%, 38.8%)   | 388.5/711.4 = 54.6%<br>(41.5%, 67.1%)   | 257/711.4 = 36.1%<br>(24.7%, 49.3%)     |

(continued)

| Group              | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                               | % 2-Fold Rise                           | % 4-Fold Rise                           |
|--------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| Age 18 - 59 Female | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 73  | 157.7/711.4 = 22.2%<br>(13.5%, 34.2%)   | 417.9/711.4 = 58.7%<br>(45.4%, 70.9%)   | 273.7/711.4 = 38.5%<br>(27.1%, 51.3%)   |
| Age 18 - 59 Male   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 215 | 220.7/5936.9 = 3.7%<br>(1.9%, 7.2%)     | 1022.1/5936.9 = 17.2%<br>(12.4%, 23.4%) | 558.6/5936.9 = 9.4%<br>(6.1%, 14.1%)    |
| Age 18 - 59 Male   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 215 | 2724.6/5936.9 = 45.9%<br>(38.7%, 53.3%) | 4299.3/5936.9 = 72.4%<br>(65.4%, 78.5%) | 3217.4/5936.9 = 54.2%<br>(46.9%, 61.4%) |
| Age 18 - 59 Male   | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 215 | 2194.5/5936.9 = 37.0%<br>(30.2%, 44.3%) | 4738.8/5936.9 = 79.8%<br>(73.2%, 85.1%) | 3900.5/5936.9 = 65.7%<br>(58.4%, 72.3%) |
| Age 18 - 59 Male   | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 62  | 30.3/589.8 = 5.1%<br>(1.6%, 15.7%)      | 183.7/589.8 = 31.2%<br>(20.1%, 44.8%)   | 126/589.8 = 21.4%<br>(12.3%, 34.4%)     |
| Age 18 - 59 Male   | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 62  | 415.4/589.8 = 70.4%<br>(57.0%, 81.1%)   | 485/589.8 = 82.2%<br>(69.2%, 90.5%)     | 442/589.8 = 74.9%<br>(61.9%, 84.6%)     |
| Age 18 - 59 Male   | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 62  | 321.8/589.8 = 54.6%<br>(40.8%, 67.6%)   | 547.2/589.8 = 92.8%<br>(83.1%, 97.1%)   | 484.6/589.8 = 82.2%<br>(68.8%, 90.6%)   |
| Age 18 - 59 Male   | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 31  | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Male   | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 31  | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Male   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 31  | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         | 0/7779.3 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Male   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 66  | 6.1/604.6 = 1.0%<br>(0.1%, 7.1%)        | 62.8/604.6 = 10.4%<br>(5.0%, 20.2%)     | 16.9/604.6 = 2.8%<br>(0.9%, 8.8%)       |
| Age 18 - 59 Male   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 66  | 134.6/604.6 = 22.3%<br>(14.0%, 33.5%)   | 328.8/604.6 = 54.4%<br>(40.4%, 67.7%)   | 218.5/604.6 = 36.1%<br>(24.6%, 49.6%)   |

(continued)

| Group            | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                               | % 2-Fold Rise                           | % 4-Fold Rise                           |
|------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| Age 18 - 59 Male | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 66  | 74.6/604.6 = 12.3%<br>(6.2%, 23.1%)     | 400/604.6 = 66.2%<br>(51.8%, 78.0%)     | 302.9/604.6 = 50.1%<br>(36.6%, 63.6%)   |
| Age ≥ 60 Female  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 259 | 516/3737.8 = 13.8%<br>(9.7%, 19.2%)     | 1518/3737.8 = 40.6%<br>(34.2%, 47.3%)   | 993.5/3737.8 = 26.6%<br>(21.2%, 32.8%)  |
| Age ≥ 60 Female  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 259 | 2829.5/3737.8 = 75.7%<br>(69.6%, 80.9%) | 3467.8/3737.8 = 92.8%<br>(88.6%, 95.5%) | 3149.2/3737.8 = 84.3%<br>(78.9%, 88.5%) |
| Age ≥ 60 Female  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 259 | 2637.7/3737.8 = 70.6%<br>(64.3%, 76.2%) | 3658.7/3737.8 = 97.9%<br>(95.3%, 99.1%) | 3481.7/3737.8 = 93.1%<br>(89.2%, 95.7%) |
| Age ≥ 60 Female  | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 81  | 79.7/433.9 = 18.4%<br>(10.8%, 29.4%)    | 193.3/433.9 = 44.6%<br>(33.2%, 56.5%)   | 146.5/433.9 = 33.8%<br>(24.0%, 45.2%)   |
| Age ≥ 60 Female  | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 81  | 386.7/433.9 = 89.1%<br>(79.0%, 94.7%)   | 412.1/433.9 = 95.0%<br>(85.4%, 98.4%)   | 394.5/433.9 = 90.9%<br>(80.7%, 96.0%)   |
| Age ≥ 60 Female  | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 81  | 341.2/433.9 = 78.6%<br>(67.0%, 87.0%)   | 424.8/433.9 = 97.9%<br>(86.0%, 99.7%)   | 407.7/433.9 = 94.0%<br>(84.1%, 97.9%)   |
| Age ≥ 60 Female  | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 31  | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Female  | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 31  | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Female  | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 31  | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3584.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Female  | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 81  | 14.7/367.8 = 4.0%<br>(1.5%, 10.3%)      | 144.5/367.8 = 39.3%<br>(28.0%, 51.8%)   | 80.4/367.8 = 21.8%<br>(13.5%, 33.4%)    |
| Age ≥ 60 Female  | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 81  | 231.9/367.8 = 63.1%<br>(49.9%, 74.5%)   | 337.1/367.8 = 91.7%<br>(80.9%, 96.6%)   | 272.6/367.8 = 74.1%<br>(60.8%, 84.1%)   |

(continued)

| Group           | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                               | % 2-Fold Rise                            | % 4-Fold Rise                           |
|-----------------|--------|---------|---------------------|-------------------------|-----|---|--|---|
| Age ≥ 60 Female | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 81  | 239.3/367.8 = 65.1%<br>(52.2%, 76.0%)   | 346.3/367.8 = 94.1%<br>(82.9%, 98.2%)    | 324.9/367.8 = 88.3%<br>(76.5%, 94.6%)   |
| Age ≥ 60 Male   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 201 | 330.2/2939.2 = 11.2%<br>(7.6%, 16.4%)   | 1123.4/2939.2 = 38.2%<br>(31.0%, 46.0%)  | 864.6/2939.2 = 29.4%<br>(22.8%, 37.0%)  |
| Age ≥ 60 Male   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 201 | 2283.2/2939.2 = 77.7%<br>(70.6%, 83.4%) | 2680.7/2939.2 = 91.2%<br>(85.7%, 94.7%)  | 2468.2/2939.2 = 84.0%<br>(77.3%, 88.9%) |
| Age ≥ 60 Male   | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 201 | 2134.3/2939.2 = 72.6%<br>(65.2%, 79.0%) | 2878.3/2939.2 = 97.9%                    | 2773.1/2939.2 = 94.3%<br>(90.0%, 96.9%) |
| Age ≥ 60 Male   | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 61  | 60.5/288.1 = 21.0%<br>(11.5%, 35.3%)    | 174.1/288.1 = 60.4%<br>(46.3%, 73.0%)    | 109.2/288.1 = 37.9%<br>(25.0%, 52.7%)   |
| Age ≥ 60 Male   | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 61  | 257.5/288.1 = 89.4%<br>(80.2%, 94.6%)   | 278.3/288.1 = 96.6%<br>(89.7%, 98.9%)    | 260.9/288.1 = 90.6%<br>(81.7%, 95.4%)   |
| Age ≥ 60 Male   | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 61  | 253.9/288.1 = 88.1%<br>(76.7%, 94.4%)   | 288.1/288.1 = 100.0%<br>(100.0%, 100.0%) | 284.9/288.1 = 98.9%<br>(92.1%, 99.9%)   |
| Age ≥ 60 Male   | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 24  | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)          | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Male   | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 24  | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)          | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Male   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 24  | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)          | 0/3236.5 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60 Male   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 60  | 26/295.2 = 8.8%<br>(3.1%, 22.4%)        | 126/295.2 = 42.7%<br>(29.1%, 57.5%)      | 76.3/295.2 = 25.8%<br>(15.0%, 40.7%)    |
| Age ≥ 60 Male   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 60  | 205/295.2 = 69.5%<br>(54.1%, 81.4%)     | 245.9/295.2 = 83.3%<br>(68.4%, 92.0%)    | 233.2/295.2 = 79.0%<br>(64.4%, 88.6%)   |
| Age ≥ 60 Male   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 60  | 165.1/295.2 = 55.9%<br>(40.9%, 69.9%)   | 265.9/295.2 = 90.1%<br>(74.7%, 96.5%)    | 255.2/295.2 = 86.4%<br>(71.4%, 94.2%)   |

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 6g. 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                            |
|-------------------------------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| <b>Hispanic or Latino ethnicity</b> |        |         |                     |                         |     |  |  |  |
| Hispanic or Latino                  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 374 | 539.6/10111.8 = 5.3%<br>(3.6%, 7.8%)     | 2477.3/10111.8 = 24.5%<br>(20.3%, 29.3%) | 1493.4/10111.8 = 14.8%<br>(11.7%, 18.5%) |
| Hispanic or Latino                  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 374 | 5689.2/10111.8 = 56.3%<br>(50.6%, 61.7%) | 8215.3/10111.8 = 81.2%<br>(76.2%, 85.4%) | 6471.3/10111.8 = 64.0%<br>(58.4%, 69.2%) |
| Hispanic or Latino                  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 374 | 4773.5/10111.8 = 47.2%<br>(41.9%, 52.6%) | 8600.3/10111.8 = 85.1%<br>(80.3%, 88.8%) | 7648.8/10111.8 = 75.6%<br>(70.4%, 80.2%) |
| Hispanic or Latino                  | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 106 | 75/993.9 = 7.5%<br>(3.6%, 15.1%)         | 293.4/993.9 = 29.5%<br>(20.8%, 40.0%)    | 166.5/993.9 = 16.8%<br>(10.2%, 26.2%)    |
| Hispanic or Latino                  | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 106 | 707.6/993.9 = 71.2%<br>(60.6%, 79.9%)    | 907/993.9 = 91.3%<br>(82.8%, 95.8%)      | 791/993.9 = 79.6%<br>(69.6%, 86.9%)      |
| Hispanic or Latino                  | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 106 | 610.1/993.9 = 61.4%<br>(50.5%, 71.3%)    | 965.3/993.9 = 97.1%<br>(91.0%, 99.1%)    | 891.2/993.9 = 89.7%<br>(80.3%, 94.9%)    |
| Hispanic or Latino                  | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 44  | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         |
| Hispanic or Latino                  | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 44  | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         |
| Hispanic or Latino                  | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 44  | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         | 0/10019.2 = 0.0%<br>(0.0%, 0.0%)         |
| Hispanic or Latino                  | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 105 | 19.6/1003.3 = 1.9%<br>(0.5%, 6.7%)       | 182/1003.3 = 18.1%<br>(12.5%, 25.6%)     | 100.6/1003.3 = 10.0%<br>(6.2%, 15.9%)    |
| Hispanic or Latino                  | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 105 | 375.2/1003.3 = 37.4%<br>(28.3%, 47.5%)   | 645.1/1003.3 = 64.3%<br>(53.5%, 73.8%)   | 524.4/1003.3 = 52.3%<br>(41.8%, 62.5%)   |

(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) | 105 | 332.3/1003.3 = 33.1%<br>(24.7%, 42.8%)  | 688.2/1003.3 = 68.6%<br>(57.9%, 77.6%)  | 553.3/1003.3 = 55.2%<br>(45.1%, 64.8%)  |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 477 | 557.4/8055.6 = 6.9%<br>(5.0%, 9.5%)     | 2157.3/8055.6 = 26.8%<br>(22.7%, 31.3%) | 1358.7/8055.6 = 16.9%<br>(13.6%, 20.7%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 477 | 4275.6/8055.6 = 53.1%<br>(48.3%, 57.8%) | 6192.9/8055.6 = 76.9%<br>(72.4%, 80.8%) | 4791.6/8055.6 = 59.5%<br>(54.6%, 64.2%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 477 | 3945.2/8055.6 = 49.0%<br>(44.2%, 53.8%) | 7026.7/8055.6 = 87.2%<br>(83.5%, 90.2%) | 6040.3/8055.6 = 75.0%<br>(70.4%, 79.1%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 164 | 147.1/1004.4 = 14.6%<br>(9.7%, 21.5%)   | 416.6/1004.4 = 41.5%<br>(33.6%, 49.8%)  | 311.3/1004.4 = 31.0%<br>(23.8%, 39.2%)  |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 164 | 793.6/1004.4 = 79.0%<br>(71.3%, 85.1%)  | 880.2/1004.4 = 87.6%<br>(80.6%, 92.4%)  | 818.9/1004.4 = 81.5%<br>(74.2%, 87.2%)  |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 164 | 656.1/1004.4 = 65.3%<br>(56.8%, 73.0%)  | 935.4/1004.4 = 93.1%<br>(86.8%, 96.6%)  | 870.3/1004.4 = 86.6%<br>(79.3%, 91.7%)  |
| Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         |
| Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         |
| Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         | 0/7726.8 = 0.0%<br>(0.0%, 0.0%)         |
| Not Hispanic or Latino | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 152 | 38.2/801.6 = 4.8%<br>(2.2%, 10.1%)      | 204.2/801.6 = 25.5%<br>(18.7%, 33.7%)   | 89.3/801.6 = 11.1%<br>(6.9%, 17.5%)     |
| Not Hispanic or Latino | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 152 | 352.6/801.6 = 44.0%<br>(35.5%, 52.9%)   | 553.8/801.6 = 69.1%<br>(59.7%, 77.1%)   | 422.4/801.6 = 52.7%<br>(43.7%, 61.5%)   |

(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) | 152 | 284.7/801.6 = 35.5%<br>(28.0%, 43.8%) | 602.6/801.6 = 75.2%<br>(65.7%, 82.7%)    | 477.8/801.6 = 59.6%<br>(50.4%, 68.2%)  |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 62  | 50.9/1124.6 = 4.5%<br>(1.7%, 11.3%)   | 276.2/1124.6 = 24.6%<br>(14.8%, 37.9%)   | 153.1/1124.6 = 13.6%<br>(7.1%, 24.5%)  |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 62  | 531/1124.6 = 47.2%<br>(34.1%, 60.7%)  | 862.3/1124.6 = 76.7%<br>(62.1%, 86.8%)   | 709.5/1124.6 = 63.1%<br>(48.4%, 75.7%) |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 62  | 507/1124.6 = 45.1%<br>(32.1%, 58.8%)  | 965.4/1124.6 = 85.8%<br>(71.0%, 93.7%)   | 860.4/1124.6 = 76.5%<br>(62.1%, 86.6%) |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 13  | 0/103.7 = 0.0%<br>(0.0%, 0.0%)        | 30.9/103.7 = 29.8%<br>(5.8%, 74.6%)      | 14.3/103.7 = 13.8%<br>(1.7%, 60.3%)    |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 13  | 68/103.7 = 65.5%<br>(15.6%, 95.1%)    | 85.8/103.7 = 82.8%<br>(13.9%, 99.3%)     | 75.2/103.7 = 72.5%<br>(16.2%, 97.3%)   |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 13  | 44.2/103.7 = 42.6%<br>(9.3%, 84.3%)   | 103.7/103.7 = 100.0%<br>(100.0%, 100.0%) | 85.8/103.7 = 82.8%<br>(13.9%, 99.3%)   |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 9   | 0/1587 = 0.0%                         | 0/1587 = 0.0%                            | 0/1587 = 0.0%                          |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 9   | 0/1587 = 0.0%                         | 0/1587 = 0.0%                            | 0/1587 = 0.0%                          |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 9   | 0/1587 = 0.0%                         | 0/1587 = 0.0%                            | 0/1587 = 0.0%                          |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 23  | 3.8/174.1 = 2.2%<br>(0.2%, 17.4%)     | 13.7/174.1 = 7.8%<br>(2.4%, 23.0%)       | 13.7/174.1 = 7.8%<br>(2.4%, 23.0%)     |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 23  | 25.3/174.1 = 14.5%<br>(5.9%, 31.4%)   | 101.3/174.1 = 58.2%<br>(30.3%, 81.7%)    | 34.4/174.1 = 19.8%<br>(8.7%, 39.0%)    |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 23  | 19.7/174.1 = 11.3%<br>(4.0%, 27.8%)   | 139.1/174.1 = 79.9%<br>(52.6%, 93.4%)    | 125.5/174.1 = 72.1%<br>(45.9%, 88.7%)  |

(continued)

| Group | Visit | Arm | Baseline<br>SARS-CoV-2 | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-------|-------|-----|------------------------|--------|---|-----------|---------------|---------------|
|-------|-------|-----|------------------------|--------|---|-----------|---------------|---------------|

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.

MOCK

Table 6h. 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                           |
|--------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| <b>Race</b>        |        |         |                     |                         |     |   |   |   |
| White Non-Hispanic | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 196 | 322.7/3997.3 = 8.1%<br>(5.1%, 12.5%)    | 1219.7/3997.3 = 30.5%<br>(24.1%, 37.8%) | 782.4/3997.3 = 19.6%<br>(14.4%, 26.0%)  |
| White Non-Hispanic | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 196 | 2175.9/3997.3 = 54.4%<br>(47.0%, 61.7%) | 3115.1/3997.3 = 77.9%<br>(70.8%, 83.7%) | 2476.6/3997.3 = 62.0%<br>(54.4%, 69.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 196 | 1953/3997.3 = 48.9%<br>(41.5%, 56.2%)   | 3523.3/3997.3 = 88.1%<br>(82.2%, 92.3%) | 3021/3997.3 = 75.6%<br>(68.3%, 81.6%)   |
| White Non-Hispanic | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 63  | 92/475.6 = 19.3%<br>(10.8%, 32.2%)      | 212.9/475.6 = 44.8%<br>(32.2%, 58.0%)   | 158.3/475.6 = 33.3%<br>(22.1%, 46.8%)   |
| White Non-Hispanic | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 63  | 397.7/475.6 = 83.6%<br>(71.1%, 91.4%)   | 434.1/475.6 = 91.3%<br>(79.6%, 96.5%)   | 423/475.6 = 88.9%<br>(77.2%, 95.0%)     |
| White Non-Hispanic | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 63  | 327.4/475.6 = 68.8%<br>(55.1%, 79.9%)   | 464.5/475.6 = 97.7%<br>(84.4%, 99.7%)   | 428.8/475.6 = 90.2%<br>(77.7%, 96.0%)   |
| White Non-Hispanic | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 23  | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         |
| White Non-Hispanic | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 23  | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         |
| White Non-Hispanic | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 23  | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         | 0/3812.6 = 0.0%<br>(0.0%, 0.0%)         |
| White Non-Hispanic | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 56  | 19.3/346.9 = 5.6%<br>(1.6%, 18.0%)      | 100.5/346.9 = 29.0%<br>(17.9%, 43.2%)   | 44.2/346.9 = 12.8%<br>(6.0%, 25.1%)     |
| White Non-Hispanic | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 56  | 153.1/346.9 = 44.1%<br>(30.6%, 58.6%)   | 241.1/346.9 = 69.5%<br>(54.2%, 81.4%)   | 178.3/346.9 = 51.4%<br>(37.1%, 65.4%)   |

(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) | 56  | 109/346.9 = 31.4%<br>(20.5%, 44.8%)     | 269.3/346.9 = 77.6%<br>(62.3%, 87.9%)   | 213/346.9 = 61.4%<br>(46.6%, 74.4%)     |
| Black or African American | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 332 | 302/5012.5 = 6.0%<br>(4.0%, 8.9%)       | 1206.7/5012.5 = 24.1%<br>(19.6%, 29.2%) | 697.2/5012.5 = 13.9%<br>(10.6%, 18.0%)  |
| Black or African American | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 332 | 2663.7/5012.5 = 53.1%<br>(47.4%, 58.8%) | 3784.2/5012.5 = 75.5%<br>(70.0%, 80.3%) | 3060.8/5012.5 = 61.1%<br>(55.3%, 66.6%) |
| Black or African American | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 332 | 2268.2/5012.5 = 45.3%<br>(39.6%, 51.0%) | 4426.6/5012.5 = 88.3%<br>(84.1%, 91.5%) | 3778.3/5012.5 = 75.4%<br>(70.0%, 80.1%) |
| Black or African American | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 111 | 51/600 = 8.5%<br>(4.9%, 14.3%)          | 187.2/600 = 31.2%<br>(22.7%, 41.1%)     | 137.9/600 = 23.0%<br>(15.9%, 32.1%)     |
| Black or African American | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 111 | 399.3/600 = 66.6%<br>(55.3%, 76.2%)     | 496.2/600 = 82.7%<br>(71.6%, 90.1%)     | 417.4/600 = 69.6%<br>(58.3%, 78.9%)     |
| Black or African American | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 111 | 346/600 = 57.7%<br>(46.6%, 68.0%)       | 542.1/600 = 90.3%<br>(80.8%, 95.4%)     | 494.8/600 = 82.5%<br>(71.2%, 89.9%)     |
| Black or African American | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 38  | 0/4983 = 0.0%<br>(0.0%, 0.0%)           | 0/4983 = 0.0%<br>(0.0%, 0.0%)           | 0/4983 = 0.0%<br>(0.0%, 0.0%)           |
| Black or African American | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 38  | 0/4983 = 0.0%<br>(0.0%, 0.0%)           | 0/4983 = 0.0%<br>(0.0%, 0.0%)           | 0/4983 = 0.0%<br>(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) | 38 | 0/4983 = 0.0%<br>(0.0%, 0.0%)         | 0/4983 = 0.0%<br>(0.0%, 0.0%)         | 0/4983 = 0.0%<br>(0.0%, 0.0%)         |
| Black or African American | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 94 | 17.5/474.5 = 3.7%<br>(1.4%, 9.6%)     | 95.7/474.5 = 20.2%<br>(13.0%, 30.0%)  | 65.5/474.5 = 13.8%<br>(7.9%, 23.1%)   |
| Black or African American | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 94 | 200.6/474.5 = 42.3%<br>(31.6%, 53.8%) | 298.5/474.5 = 62.9%<br>(50.1%, 74.1%) | 228.4/474.5 = 48.1%<br>(37.0%, 59.5%) |
| Black or African American | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 94 | 162.5/474.5 = 34.2%<br>(24.8%, 45.2%) | 321.7/474.5 = 67.8%<br>(54.6%, 78.7%) | 249.4/474.5 = 52.6%<br>(40.9%, 64.0%) |
| Asian                     | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 18 | 37.5/324.9 = 11.6%<br>(2.1%, 44.2%)   | 56.2/324.9 = 17.3%<br>(4.3%, 49.5%)   | 56.2/324.9 = 17.3%<br>(4.3%, 49.5%)   |
| Asian                     | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 18 | 171.6/324.9 = 52.8%<br>(23.8%, 80.0%) | 282.7/324.9 = 87.0%<br>(52.2%, 97.6%) | 226.5/324.9 = 69.7%<br>(38.5%, 89.4%) |
| Asian                     | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 18 | 113.5/324.9 = 34.9%<br>(13.4%, 65.0%) | 304.7/324.9 = 93.8%<br>(56.3%, 99.4%) | 284.5/324.9 = 87.5%<br>(53.8%, 97.7%) |
| Asian                     | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 5  | 0/32.2 = 0.0%                         | 10.6/32.2 = 32.7%                     | 0/32.2 = 0.0%                         |
| Asian                     | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 5  | 24.9/32.2 = 77.4%                     | 24.9/32.2 = 77.4%                     | 24.9/32.2 = 77.4%                     |
| Asian                     | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 5  | 20.1/32.2 = 62.3%                     | 32.2/32.2 = 100.0%                    | 32.2/32.2 = 100.0%                    |
| Asian                     | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0/258 = 0.0%                          | 0/258 = 0.0%                          | 0/258 = 0.0%                          |
| Asian                     | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0/258 = 0.0%                          | 0/258 = 0.0%                          | 0/258 = 0.0%                          |
| Asian                     | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0/258 = 0.0%                          | 0/258 = 0.0%                          | 0/258 = 0.0%                          |
| Asian                     | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 10 | 0/40.7 = 0.0%<br>(0.0%, 0.0%)         | 8.3/40.7 = 20.5%<br>(1.8%, 78.4%)     | 3.8/40.7 = 9.3%<br>(0.3%, 75.9%)      |
| Asian                     | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 10 | 8.3/40.7 = 20.5%<br>(1.8%, 78.4%)     | 24.3/40.7 = 59.8%<br>(12.5%, 94.0%)   | 19.8/40.7 = 48.7%<br>(8.0%, 91.2%)    |

(continued)

| Group                            | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                               | % 2-Fold Rise                           | % 4-Fold Rise                           |
|----------------------------------|--------|---------|---------------------|-------------------------|-----|---|---|---|
| Asian                            | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 10  | 8.3/40.7 = 20.5%<br>(1.8%, 78.4%)       | 39.3/40.7 = 96.6%<br>(48.3%, 99.9%)     | 21.4/40.7 = 52.6%<br>(9.0%, 92.6%)      |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 149 | 233.5/5037.1 = 4.6%<br>(2.5%, 8.6%)     | 1213.1/5037.1 = 24.1%<br>(17.8%, 31.7%) | 644.9/5037.1 = 12.8%<br>(8.8%, 18.2%)   |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 149 | 2641.2/5037.1 = 52.4%<br>(43.9%, 60.8%) | 4028.1/5037.1 = 80.0%<br>(71.7%, 86.3%) | 2981.2/5037.1 = 59.2%<br>(50.5%, 67.4%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 149 | 2278.9/5037.1 = 45.2%<br>(37.1%, 53.6%) | 4116.7/5037.1 = 81.7%<br>(73.6%, 87.8%) | 3659.6/5037.1 = 72.7%<br>(64.1%, 79.8%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 49  | 68.3/561.8 = 12.2%<br>(5.4%, 25.2%)     | 223.4/561.8 = 39.8%<br>(26.3%, 55.0%)   | 127.8/561.8 = 22.8%<br>(12.5%, 37.8%)   |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 49  | 425.1/561.8 = 75.7%<br>(59.6%, 86.8%)   | 516.9/561.8 = 92.0%<br>(76.6%, 97.6%)   | 455.2/561.8 = 81.0%<br>(65.2%, 90.7%)   |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 49  | 346.8/561.8 = 61.7%<br>(46.1%, 75.3%)   | 540.5/561.8 = 96.2%<br>(85.2%, 99.1%)   | 480.4/561.8 = 85.5%<br>(70.2%, 93.7%)   |
| American Indian or Alaska Native | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 18  | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         |
| American Indian or Alaska Native | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 18  | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)         |

(continued)

| Group                                     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                             | % 2-Fold Rise                         | % 4-Fold Rise                         |
|---|--------|---------|---------------------|-------------------------|----|---------------------------------------|---------------------------------------|---------------------------------------|
| American Indian or Alaska Native          | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 18 | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)       | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)       | 0/5012.8 = 0.0%<br>(0.0%, 0.0%)       |
| American Indian or Alaska Native          | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 48 | 6.6/554.6 = 1.2%<br>(0.2%, 8.5%)      | 100.9/554.6 = 18.2%<br>(10.1%, 30.5%) | 43.2/554.6 = 7.8%<br>(3.5%, 16.5%)    |
| American Indian or Alaska Native          | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 48 | 215.1/554.6 = 38.8%<br>(25.9%, 53.4%) | 376.8/554.6 = 67.9%<br>(51.7%, 80.8%) | 287.4/554.6 = 51.8%<br>(36.8%, 66.5%) |
| American Indian or Alaska Native          | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 48 | 176.9/554.6 = 31.9%<br>(20.6%, 45.8%) | 383.7/554.6 = 69.2%<br>(52.6%, 82.0%) | 297/554.6 = 53.5%<br>(38.8%, 67.7%)   |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 2  | 0/45.4 = 0.0%                         | 26.7/45.4 = 58.8%                     | 0/45.4 = 0.0%                         |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 26.7/45.4 = 58.8%                     | 45.4/45.4 = 100.0%                    | 45.4/45.4 = 100.0%                    |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 2  | 26.7/45.4 = 58.8%                     | 45.4/45.4 = 100.0%                    | 45.4/45.4 = 100.0%                    |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 1  | 0/5.5 = 0.0%                          | 0/5.5 = 0.0%                          | 0/5.5 = 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 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 5.5/5.5 = 100.0%                      | 5.5/5.5 = 100.0%                       | 5.5/5.5 = 100.0%                       |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 1  | 5.5/5.5 = 100.0%                      | 5.5/5.5 = 100.0%                       | 5.5/5.5 = 100.0%                       |
| Multiracial                               | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 25 | 18.8/579.7 = 3.2%<br>(0.4%, 23.2%)    | 150.8/579.7 = 26.0%<br>(11.2%, 49.5%)  | 117.7/579.7 = 20.3%<br>(8.0%, 42.7%)   |
| Multiracial                               | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 25 | 366.1/579.7 = 63.2%<br>(40.0%, 81.5%) | 522.1/579.7 = 90.1%<br>(70.1%, 97.2%)  | 403.7/579.7 = 69.6%<br>(46.0%, 86.1%)  |
| Multiracial                               | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 25 | 363.3/579.7 = 62.7%<br>(39.1%, 81.5%) | 500.3/579.7 = 86.3%<br>(61.6%, 96.1%)  | 451.3/579.7 = 77.8%<br>(52.9%, 91.6%)  |
| Multiracial                               | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 9  | 0/77.7 = 0.0%<br>(0.0%, 0.0%)         | 33.5/77.7 = 43.1%<br>(6.9%, 88.6%)     | 14.2/77.7 = 18.3%<br>(1.6%, 75.5%)     |
| Multiracial                               | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 9  | 53.5/77.7 = 68.8%<br>(12.0%, 97.3%)   | 71.4/77.7 = 91.8%<br>(27.1%, 99.7%)    | 71.4/77.7 = 91.8%<br>(27.1%, 99.7%)    |
| Multiracial                               | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 9  | 39.2/77.7 = 50.5%<br>(8.7%, 91.7%)    | 77.7/77.7 = 100.0%<br>(100.0%, 100.0%) | 77.7/77.7 = 100.0%<br>(100.0%, 100.0%) |
| Multiracial                               | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0/447.1 = 0.0%                        | 0/447.1 = 0.0%                         | 0/447.1 = 0.0%                         |
| Multiracial                               | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0/447.1 = 0.0%                        | 0/447.1 = 0.0%                         | 0/447.1 = 0.0%                         |
| Multiracial                               | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0/447.1 = 0.0%                        | 0/447.1 = 0.0%                         | 0/447.1 = 0.0%                         |
| Multiracial                               | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 15 | 10.1/90.7 = 11.2%<br>(0.7%, 70.1%)    | 30.2/90.7 = 33.3%<br>(8.1%, 73.9%)     | 15.6/90.7 = 17.2%<br>(2.3%, 64.5%)     |
| Multiracial                               | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 15 | 48.2/90.7 = 53.2%<br>(16.6%, 86.7%)   | 69.2/90.7 = 76.3%<br>(30.6%, 95.9%)    | 56/90.7 = 61.8%<br>(21.9%, 90.3%)      |
| Multiracial                               | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 15 | 35.3/90.7 = 39.0%<br>(10.4%, 77.8%)   | 62.4/90.7 = 68.8%<br>(26.6%, 93.1%)    | 62.4/90.7 = 68.8%<br>(26.6%, 93.1%)    |
| Not reported and unknown                  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 12 | 0/231.3 = 0.0%<br>(0.0%, 0.0%)        | 112/231.3 = 48.4%<br>(9.3%, 89.6%)     | 93.2/231.3 = 40.3%<br>(5.6%, 88.4%)    |

(continued)

| Group                    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                             | % 2-Fold Rise                            | % 4-Fold Rise                         |
|--------------------------|--------|---------|---------------------|-------------------------|----|---------------------------------------|--|---------------------------------------|
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 12 | 192.3/231.3 = 83.2%<br>(27.4%, 98.5%) | 231.3/231.3 = 100.0%<br>(100.0%, 100.0%) | 192.3/231.3 = 83.2%<br>(27.4%, 98.5%) |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 12 | 211/231.3 = 91.2%<br>(25.9%, 99.7%)   | 231.3/231.3 = 100.0%<br>(100.0%, 100.0%) | 211/231.3 = 91.2%<br>(25.9%, 99.7%)   |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1  | 0/6.8 = 0.0%                          | 0/6.8 = 0.0%                             | 0/6.8 = 0.0%                          |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 6.8/6.8 = 100.0%                      | 6.8/6.8 = 100.0%                         | 6.8/6.8 = 100.0%                      |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 1  | 6.8/6.8 = 100.0%                      | 6.8/6.8 = 100.0%                         | 6.8/6.8 = 100.0%                      |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0/254 = 0.0%                          | 0/254 = 0.0%                             | 0/254 = 0.0%                          |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0/254 = 0.0%                          | 0/254 = 0.0%                             | 0/254 = 0.0%                          |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0/254 = 0.0%                          | 0/254 = 0.0%                             | 0/254 = 0.0%                          |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 4  | 1.4/28.3 = 4.9%                       | 7.8/28.3 = 27.5%                         | 1.4/28.3 = 4.9%                       |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 4  | 1.4/28.3 = 4.9%                       | 21.7/28.3 = 76.6%                        | 21.7/28.3 = 76.6%                     |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 4  | 28.3/28.3 = 100.0%                    | 28.3/28.3 = 100.0%                       | 28.3/28.3 = 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 6i. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Underrepresented Minority Status in the U.S.

| Group   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % 2-Fold Rise                         | % 4-Fold Rise                         |
|---|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| <b>Underrepresented Minority Status in the U.S.</b> |        |         |                     |                         |     |                                       |                                       |                                       |
| URM   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 187.6/3939 = 4.8%<br>(2.7%, 8.3%)     | 843.5/3939 = 21.4%<br>(16.4%, 27.5%)  | 589.7/3939 = 15.0%<br>(10.8%, 20.4%)  |
| URM   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 2041/3939 = 51.8%<br>(45.0%, 58.5%)   | 3049.9/3939 = 77.4%<br>(70.9%, 82.8%) | 2449.3/3939 = 62.2%<br>(55.3%, 68.6%) |
| URM   | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 1780.2/3939 = 45.2%<br>(38.8%, 51.7%) | 3452.9/3939 = 87.7%<br>(81.9%, 91.8%) | 3007.6/3939 = 76.4%<br>(69.8%, 81.9%) |
| URM   | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 19.1/459 = 4.2%<br>(1.7%, 9.7%)       | 110.4/459 = 24.1%<br>(15.0%, 36.2%)   | 77.9/459 = 17.0%<br>(9.5%, 28.4%)     |
| URM   | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 268.2/459 = 58.4%<br>(45.3%, 70.4%)   | 384.1/459 = 83.7%<br>(70.7%, 91.6%)   | 304.6/459 = 66.4%<br>(53.0%, 77.6%)   |
| URM   | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 266/459 = 57.9%<br>(45.0%, 69.9%)     | 405.3/459 = 88.3%<br>(75.8%, 94.8%)   | 380.7/459 = 82.9%<br>(69.8%, 91.1%)   |
| URM   | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         |
| URM   | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         |
| URM   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         | 0/3770 = 0.0%<br>(0.0%, 0.0%)         |
| URM   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 70  | 5.7/418 = 1.4%<br>(0.3%, 5.3%)        | 75.5/418 = 18.1%<br>(11.5%, 27.1%)    | 45.1/418 = 10.8%<br>(5.7%, 19.5%)     |
| URM   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 164.3/418 = 39.3%<br>(28.5%, 51.2%)   | 284.9/418 = 68.2%<br>(55.3%, 78.7%)   | 193.7/418 = 46.3%<br>(34.9%, 58.2%)   |
| URM   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 70  | 130.5/418 = 31.2%<br>(22.2%, 41.9%)   | 287.7/418 = 68.8%<br>(56.0%, 79.3%)   | 227.4/418 = 54.4%<br>(43.0%, 65.4%)   |
| Non-URM   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 328.5/4659 = 7.1%<br>(4.5%, 10.9%)    | 1364.2/4659 = 29.3%<br>(23.4%, 35.9%) | 846.6/4659 = 18.2%<br>(13.5%, 23.9%)  |
| Non-URM   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 2499/4659 = 53.6%<br>(46.9%, 60.2%)   | 3584.3/4659 = 76.9%<br>(70.4%, 82.4%) | 2819.5/4659 = 60.5%<br>(53.6%, 67.0%) |

(continued)

| Group   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % 2-Fold Rise                         | % 4-Fold Rise                         |
|---------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Non-URM | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 2309.8/4659 = 49.6%<br>(42.8%, 56.3%) | 4052.7/4659 = 87.0%<br>(81.4%, 91.1%) | 3506.3/4659 = 75.3%<br>(68.7%, 80.9%) |
| Non-URM | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 82.9/519 = 16.0%<br>(8.7%, 27.5%)     | 247.5/519 = 47.7%<br>(35.7%, 59.9%)   | 174.5/519 = 33.6%<br>(23.0%, 46.3%)   |
| Non-URM | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 446.3/519 = 86.0%<br>(74.4%, 92.9%)   | 482.7/519 = 93.0%<br>(82.1%, 97.5%)   | 471.6/519 = 90.9%<br>(80.0%, 96.1%)   |
| Non-URM | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 355/519 = 68.4%<br>(55.5%, 79.0%)     | 507.9/519 = 97.9%<br>(85.7%, 99.7%)   | 472.2/519 = 91.0%<br>(79.6%, 96.3%)   |
| Non-URM | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         |
| Non-URM | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         |
| Non-URM | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         | 0/4758 = 0.0%<br>(0.0%, 0.0%)         |
| Non-URM | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 71  | 23.1/439 = 5.3%<br>(1.7%, 14.9%)      | 124/439 = 28.2%<br>(18.6%, 40.4%)     | 51.8/439 = 11.8%<br>(6.0%, 21.8%)     |
| Non-URM | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 175.2/439 = 39.9%<br>(28.8%, 52.2%)   | 297.6/439 = 67.8%<br>(54.5%, 78.7%)   | 215.6/439 = 49.1%<br>(37.1%, 61.3%)   |
| Non-URM | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 71  | 138.7/439 = 31.6%<br>(22.2%, 42.8%)   | 340.9/439 = 77.7%<br>(64.7%, 86.8%)   | 267.3/439 = 60.9%<br>(48.1%, 72.3%)   |

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 6j. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Age, Underrepresented Minority Status in the U.S.

| Group  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                            | % 2-Fold Rise                         | % 4-Fold Rise                         |
|--|--------|---------|---------------------|-------------------------|-----|--------------------------------------|---------------------------------------|---------------------------------------|
| <b>Age, Underrepresented Minority Status in the U.S.</b> |        |         |                     |                         |     |                                      |                                       |                                       |
| Age 18 - 59 URM  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 113 | 64.1/2570 = 2.5%<br>(0.8%, 7.7%)     | 435.4/2570 = 16.9%<br>(10.9%, 25.4%)  | 291.2/2570 = 11.3%<br>(6.6%, 18.9%)   |
| Age 18 - 59 URM  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 113 | 1082/2570 = 42.1%<br>(33.1%, 51.7%)  | 1776.7/2570 = 69.1%<br>(59.7%, 77.2%) | 1319.8/2570 = 51.4%<br>(41.9%, 60.7%) |
| Age 18 - 59 URM  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 113 | 849.7/2570 = 33.1%<br>(24.9%, 42.3%) | 2107.9/2570 = 82.0%<br>(73.5%, 88.3%) | 1744.5/2570 = 67.9%<br>(58.4%, 76.1%) |
| Age 18 - 59 URM  | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 36  | 0/322 = 0.0%<br>(0.0%, 0.0%)         | 60.9/322 = 18.9%<br>(8.7%, 36.3%)     | 43.1/322 = 13.4%<br>(5.3%, 30.0%)     |
| Age 18 - 59 URM  | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 153.7/322 = 47.7%<br>(31.1%, 64.9%)  | 250.4/322 = 77.8%<br>(59.9%, 89.1%)   | 178.9/322 = 55.6%<br>(38.0%, 71.8%)   |
| Age 18 - 59 URM  | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 36  | 150.4/322 = 46.7%<br>(30.2%, 64.0%)  | 268.3/322 = 83.3%<br>(65.9%, 92.8%)   | 247.1/322 = 76.7%<br>(58.7%, 88.5%)   |
| Age 18 - 59 URM  | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0/2435 = 0.0%<br>(0.0%, 0.0%)        | 0/2435 = 0.0%<br>(0.0%, 0.0%)         | 0/2435 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 URM  | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0/2435 = 0.0%<br>(0.0%, 0.0%)        | 0/2435 = 0.0%<br>(0.0%, 0.0%)         | 0/2435 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 URM  | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0/2435 = 0.0%<br>(0.0%, 0.0%)        | 0/2435 = 0.0%<br>(0.0%, 0.0%)         | 0/2435 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 URM  | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 0/274 = 0.0%<br>(0.0%, 0.0%)         | 8.8/274 = 3.2%<br>(0.4%, 21.4%)       | 8.8/274 = 3.2%<br>(0.4%, 21.4%)       |
| Age 18 - 59 URM  | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 64.5/274 = 23.5%<br>(11.7%, 41.7%)   | 149.2/274 = 54.5%<br>(36.9%, 71.0%)   | 80.1/274 = 29.2%<br>(15.9%, 47.5%)    |

(continued)

| Group               | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % 2-Fold Rise                         | % 4-Fold Rise                         |
|---------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age 18 - 59 URM     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 33.3/274 = 12.1%<br>(4.4%, 29.4%)     | 149.2/274 = 54.5%<br>(36.9%, 71.0%)   | 88.9/274 = 32.4%<br>(18.4%, 50.6%)    |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 111 | 99.2/3065 = 3.2%<br>(1.2%, 8.6%)      | 750.1/3065 = 24.5%<br>(17.1%, 33.7%)  | 386/3065 = 12.6%<br>(7.4%, 20.7%)     |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 111 | 1246.2/3065 = 40.7%<br>(31.7%, 50.3%) | 2139.1/3065 = 69.8%<br>(60.5%, 77.7%) | 1477.6/3065 = 48.2%<br>(38.8%, 57.8%) |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 111 | 1168.7/3065 = 38.1%<br>(29.3%, 47.9%) | 2525/3065 = 82.4%<br>(74.2%, 88.4%)   | 2028.9/3065 = 66.2%<br>(56.7%, 74.5%) |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 35  | 40.3/320 = 12.6%<br>(4.5%, 30.5%)     | 123.3/320 = 38.5%<br>(23.2%, 56.6%)   | 87.7/320 = 27.4%<br>(14.3%, 46.0%)    |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 258.4/320 = 80.7%<br>(63.0%, 91.2%)   | 283.7/320 = 88.6%<br>(71.5%, 96.0%)   | 283.7/320 = 88.6%<br>(71.5%, 96.0%)   |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 35  | 196/320 = 61.2%<br>(43.0%, 76.8%)     | 308.9/320 = 96.5%<br>(77.3%, 99.6%)   | 286.8/320 = 89.6%<br>(71.6%, 96.7%)   |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         | 0/3130 = 0.0%<br>(0.0%, 0.0%)         |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 10.2/289 = 3.5%<br>(0.4%, 23.2%)      | 62.7/289 = 21.7%<br>(10.5%, 39.5%)    | 23/289 = 8.0%<br>(2.3%, 23.9%)        |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 76.7/289 = 26.6%<br>(13.7%, 45.2%)    | 168.8/289 = 58.4%<br>(40.3%, 74.5%)   | 99.7/289 = 34.5%<br>(19.7%, 53.1%)    |

(continued)

| Group                  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                            | % 2-Fold Rise                         | % 4-Fold Rise                         |
|------------------------|--------|---------|---------------------|-------------------------|-----|--------------------------------------|---------------------------------------|---------------------------------------|
| Age 18 - 59<br>Non-URM | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 52.4/289 = 18.1%<br>(8.3%, 35.0%)    | 204.6/289 = 70.8%<br>(52.4%, 84.2%)   | 135.5/289 = 46.9%<br>(30.1%, 64.5%)   |
| Age ≥ 60<br>URM        | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 114 | 123.4/1369 = 9.0%<br>(4.8%, 16.2%)   | 408.1/1369 = 29.8%<br>(21.9%, 39.1%)  | 298.4/1369 = 21.8%<br>(15.0%, 30.7%)  |
| Age ≥ 60<br>URM        | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 114 | 959/1369 = 70.1%<br>(60.9%, 77.9%)   | 1273.2/1369 = 93.0%<br>(86.4%, 96.5%) | 1129.5/1369 = 82.5%<br>(74.1%, 88.6%) |
| Age ≥ 60<br>URM        | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 114 | 930.5/1369 = 68.0%<br>(58.6%, 76.1%) | 1345/1369 = 98.3%<br>(93.0%, 99.6%)   | 1263/1369 = 92.3%<br>(85.5%, 96.0%)   |
| Age ≥ 60<br>URM        | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 35  | 19.1/137 = 13.9%<br>(5.6%, 30.8%)    | 49.5/137 = 36.1%<br>(21.4%, 53.9%)    | 34.8/137 = 25.4%<br>(13.1%, 43.4%)    |
| Age ≥ 60<br>URM        | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 114.5/137 = 83.6%<br>(66.7%, 92.8%)  | 133.6/137 = 97.5%<br>(83.1%, 99.7%)   | 125.8/137 = 91.8%<br>(76.0%, 97.5%)   |
| Age ≥ 60<br>URM        | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 35  | 115.6/137 = 84.4%<br>(68.6%, 93.0%)  | 137/137 = 100.0%<br>(100.0%, 100.0%)  | 133.6/137 = 97.5%<br>(83.1%, 99.7%)   |
| Age ≥ 60<br>URM        | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0/1335 = 0.0%<br>(0.0%, 0.0%)        | 0/1335 = 0.0%<br>(0.0%, 0.0%)         | 0/1335 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60<br>URM        | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0/1335 = 0.0%<br>(0.0%, 0.0%)        | 0/1335 = 0.0%<br>(0.0%, 0.0%)         | 0/1335 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60<br>URM        | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0/1335 = 0.0%<br>(0.0%, 0.0%)        | 0/1335 = 0.0%<br>(0.0%, 0.0%)         | 0/1335 = 0.0%<br>(0.0%, 0.0%)         |
| Age ≥ 60<br>URM        | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 5.7/144 = 3.9%<br>(0.9%, 15.0%)      | 66.6/144 = 46.3%<br>(29.2%, 64.2%)    | 36.2/144 = 25.2%<br>(13.1%, 42.9%)    |
| Age ≥ 60<br>URM        | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 99.8/144 = 69.3%<br>(50.1%, 83.6%)   | 135.7/144 = 94.2%<br>(76.9%, 98.8%)   | 113.6/144 = 78.9%<br>(59.9%, 90.4%)   |

(continued)

| Group                 | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                             | % 2-Fold Rise                         | % 4-Fold Rise                         |
|-----------------------|--------|---------|---------------------|-------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age $\geq$ 60 URM     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 97.2/144 = 67.5%<br>(48.4%, 82.1%)    | 138.5/144 = 96.2%<br>(75.5%, 99.5%)   | 138.5/144 = 96.2%<br>(75.5%, 99.5%)   |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 116 | 229.4/1594 = 14.4%<br>(8.9%, 22.4%)   | 614.1/1594 = 38.5%<br>(29.9%, 48.0%)  | 460.6/1594 = 28.9%<br>(21.1%, 38.1%)  |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 116 | 1252.8/1594 = 78.6%<br>(69.9%, 85.3%) | 1445.2/1594 = 90.7%<br>(83.6%, 94.9%) | 1341.9/1594 = 84.2%<br>(76.0%, 89.9%) |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 116 | 1141.1/1594 = 71.6%<br>(62.5%, 79.2%) | 1527.7/1594 = 95.8%<br>(90.1%, 98.3%) | 1477.5/1594 = 92.7%<br>(86.3%, 96.2%) |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 36  | 42.6/199 = 21.4%<br>(10.1%, 39.7%)    | 124.2/199 = 62.4%<br>(44.5%, 77.5%)   | 86.8/199 = 43.6%<br>(27.5%, 61.3%)    |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 187.9/199 = 94.4%<br>(78.2%, 98.8%)   | 199/199 = 100.0%<br>(100.0%, 100.0%)  | 187.9/199 = 94.4%<br>(78.2%, 98.8%)   |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 36  | 159/199 = 79.9%<br>(61.8%, 90.7%)     | 199/199 = 100.0%<br>(100.0%, 100.0%)  | 185.3/199 = 93.1%<br>(75.2%, 98.4%)   |
| Age $\geq$ 60 Non-URM | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         |
| Age $\geq$ 60 Non-URM | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         |
| Age $\geq$ 60 Non-URM | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         | 0/1628 = 0.0%<br>(0.0%, 0.0%)         |
| Age $\geq$ 60 Non-URM | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 36  | 12.9/150 = 8.6%<br>(2.6%, 24.8%)      | 61.3/150 = 40.9%<br>(25.6%, 58.2%)    | 28.8/150 = 19.2%<br>(9.0%, 36.3%)     |
| Age $\geq$ 60 Non-URM | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 98.4/150 = 65.6%<br>(48.1%, 79.7%)    | 128.8/150 = 85.9%<br>(69.0%, 94.3%)   | 115.9/150 = 77.3%<br>(59.7%, 88.6%)   |

(continued)

| Group                    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                          | % 2-Fold Rise                       | % 4-Fold Rise                       |
|--------------------------|--------|---------|---------------------|-------------------------|----|------------------------------------|-------------------------------------|-------------------------------------|
| Age $\geq$ 60<br>Non-URM | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 36 | 86.3/150 = 57.6%<br>(40.3%, 73.2%) | 136.3/150 = 90.9%<br>(74.7%, 97.1%) | 131.8/150 = 87.9%<br>(71.5%, 95.4%) |

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 6k. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by Country

| Group          | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                              | % 2-Fold Rise                           | % 4-Fold Rise                           |
|----------------|--------|---------|---------------------|-------------------------|-----|--|---|---|
| <b>Country</b> |        |         |                     |                         |     |  |   |   |
| United States  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 454 | 516.1/8598 = 6.0%<br>(4.2%, 8.4%)      | 2207.7/8598 = 25.7%<br>(21.7%, 30.1%)   | 1436.3/8598 = 16.7%<br>(13.5%, 20.6%)   |
| United States  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 454 | 4540/8598 = 52.8%<br>(48.0%, 57.5%)    | 6634.2/8598 = 77.2%<br>(72.7%, 81.1%)   | 5268.8/8598 = 61.3%<br>(56.4%, 65.9%)   |
| United States  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 454 | 4090/8598 = 47.6%<br>(42.9%, 52.3%)    | 7505.6/8598 = 87.3%<br>(83.5%, 90.3%)   | 6513.9/8598 = 75.8%<br>(71.2%, 79.8%)   |
| United States  | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 142 | 102/978 = 10.4%<br>(6.3%, 16.9%)       | 357.9/978 = 36.6%<br>(28.8%, 45.1%)     | 252.4/978 = 25.8%<br>(19.0%, 34.1%)     |
| United States  | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 142 | 714.5/978 = 73.1%<br>(64.7%, 80.0%)    | 866.7/978 = 88.6%<br>(81.1%, 93.4%)     | 776.2/978 = 79.4%<br>(71.4%, 85.6%)     |
| United States  | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 142 | 620.9/978 = 63.5%<br>(54.5%, 71.6%)    | 913.3/978 = 93.4%<br>(86.7%, 96.8%)     | 852.9/978 = 87.2%<br>(79.4%, 92.4%)     |
| United States  | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0/8528 = 0.0%<br>(0.0%, 0.0%)          | 0/8528 = 0.0%<br>(0.0%, 0.0%)           | 0/8528 = 0.0%<br>(0.0%, 0.0%)           |
| United States  | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0/8528 = 0.0%<br>(0.0%, 0.0%)          | 0/8528 = 0.0%<br>(0.0%, 0.0%)           | 0/8528 = 0.0%<br>(0.0%, 0.0%)           |
| United States  | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0/8528 = 0.0%<br>(0.0%, 0.0%)          | 0/8528 = 0.0%<br>(0.0%, 0.0%)           | 0/8528 = 0.0%<br>(0.0%, 0.0%)           |
| United States  | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 28.8/857 = 3.4%<br>(1.3%, 8.1%)        | 199.4/857 = 23.3%<br>(17.2%, 30.7%)     | 96.9/857 = 11.3%<br>(7.1%, 17.4%)       |
| United States  | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 339.5/857 = 39.6%<br>(31.7%, 48.1%)    | 582.5/857 = 68.0%<br>(59.0%, 75.8%)     | 409.3/857 = 47.8%<br>(39.4%, 56.2%)     |
| United States  | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 269.2/857 = 31.4%<br>(24.7%, 39.0%)    | 628.7/857 = 73.4%<br>(64.6%, 80.6%)     | 494.7/857 = 57.7%<br>(49.3%, 65.8%)     |
| Argentina      | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 45  | 94.5/1628.6 = 5.8%<br>(2.1%, 15.2%)    | 440.7/1628.6 = 27.1%<br>(16.1%, 41.8%)  | 234.2/1628.6 = 14.4%<br>(7.3%, 26.3%)   |
| Argentina      | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 45  | 739.4/1628.6 = 45.4%<br>(30.8%, 60.8%) | 1327.9/1628.6 = 81.5%<br>(65.3%, 91.2%) | 945.8/1628.6 = 58.1%<br>(42.0%, 72.6%)  |
| Argentina      | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 45  | 838.7/1628.6 = 51.5%<br>(36.2%, 66.6%) | 1363.4/1628.6 = 83.7%<br>(67.4%, 92.7%) | 1204.1/1628.6 = 73.9%<br>(57.4%, 85.7%) |

(continued)

| Group     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                               | % 2-Fold Rise                           | % 4-Fold Rise                           |
|-----------|--------|---------|---------------------|-------------------------|----|---|---|---|
| Argentina | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 11 | 19.5/129.4 = 15.0%<br>(2.5%, 55.2%)     | 62.9/129.4 = 48.6%<br>(17.7%, 80.6%)    | 46.5/129.4 = 35.9%<br>(10.3%, 73.2%)    |
| Argentina | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 11 | 99.4/129.4 = 76.8%<br>(32.6%, 95.8%)    | 111.5/129.4 = 86.2%<br>(34.0%, 98.7%)   | 99.4/129.4 = 76.8%<br>(32.6%, 95.8%)    |
| Argentina | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 11 | 102.4/129.4 = 79.1%<br>(35.3%, 96.3%)   | 129.4/129.4 = 100.0%                    | 111.5/129.4 = 86.2%<br>(34.0%, 98.7%)   |
| Argentina | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 5  | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           |
| Argentina | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 5  | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           |
| Argentina | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 5  | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           | 0/1460 = 0.0%                           |
| Argentina | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 16 | 0/203 = 0.0%<br>(0.0%, 0.0%)            | 30.6/203 = 15.1%<br>(4.0%, 42.9%)       | 6.6/203 = 3.3%<br>(0.4%, 24.3%)         |
| Argentina | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 16 | 75.1/203 = 37.0%<br>(14.7%, 66.6%)      | 135.1/203 = 66.5%<br>(34.6%, 88.2%)     | 89/203 = 43.8%<br>(19.1%, 72.1%)        |
| Argentina | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 16 | 63.1/203 = 31.1%<br>(11.6%, 60.7%)      | 125/203 = 61.6%<br>(31.2%, 85.0%)       | 105.7/203 = 52.1%<br>(24.8%, 78.2%)     |
| Brazil    | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 78 | 205/2605.6 = 7.9%<br>(4.0%, 14.9%)      | 808.7/2605.6 = 31.0%<br>(21.5%, 42.5%)  | 515.8/2605.6 = 19.8%<br>(12.5%, 29.9%)  |
| Brazil    | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 78 | 1713.3/2605.6 = 65.8%<br>(53.3%, 76.4%) | 2354.9/2605.6 = 90.4%<br>(79.8%, 95.7%) | 1884.3/2605.6 = 72.3%<br>(59.9%, 82.1%) |
| Brazil    | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 78 | 1283.9/2605.6 = 49.3%<br>(37.7%, 60.9%) | 2197.8/2605.6 = 84.3%<br>(72.8%, 91.6%) | 1968/2605.6 = 75.5%<br>(63.1%, 84.8%)   |
| Brazil    | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 29 | 7.3/338.2 = 2.2%<br>(0.3%, 15.3%)       | 101.4/338.2 = 30.0%<br>(15.4%, 50.2%)   | 31/338.2 = 9.2%<br>(3.3%, 23.0%)        |
| Brazil    | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 29 | 257.8/338.2 = 76.2%<br>(53.9%, 89.8%)   | 313.1/338.2 = 92.6%<br>(70.2%, 98.5%)   | 293.6/338.2 = 86.8%<br>(66.2%, 95.7%)   |
| Brazil    | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 29 | 219.5/338.2 = 64.9%<br>(43.6%, 81.5%)   | 326.1/338.2 = 96.4%<br>(76.5%, 99.5%)   | 296/338.2 = 87.5%<br>(65.7%, 96.3%)     |
| Brazil    | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 15 | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         |
| Brazil    | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 15 | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                               | % 2-Fold Rise                            | % 4-Fold Rise                           |
|----------|--------|---------|---------------------|-------------------------|----|---|--|---|
| Brazil   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 15 | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)          | 0/4560.7 = 0.0%<br>(0.0%, 0.0%)         |
| Brazil   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 30 | 6.6/358.5 = 1.8%<br>(0.2%, 13.2%)       | 70.7/358.5 = 19.7%<br>(9.3%, 37.0%)      | 40.1/358.5 = 11.2%<br>(4.4%, 25.6%)     |
| Brazil   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 30 | 97.5/358.5 = 27.2%<br>(14.8%, 44.6%)    | 192.5/358.5 = 53.7%<br>(34.3%, 72.1%)    | 168.5/358.5 = 47.0%<br>(28.6%, 66.2%)   |
| Brazil   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 30 | 99.4/358.5 = 27.7%<br>(14.9%, 45.7%)    | 268.2/358.5 = 74.8%<br>(52.7%, 88.8%)    | 214.6/358.5 = 59.9%<br>(39.5%, 77.3%)   |
| Chile    | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 13 | 72.9/356.4 = 20.5%<br>(5.2%, 54.6%)     | 186.2/356.4 = 52.3%<br>(23.4%, 79.7%)    | 139/356.4 = 39.0%<br>(15.2%, 69.6%)     |
| Chile    | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 13 | 202.9/356.4 = 56.9%<br>(26.3%, 83.1%)   | 356.4/356.4 = 100.0%<br>(100.0%, 100.0%) | 221.6/356.4 = 62.2%<br>(29.7%, 86.5%)   |
| Chile    | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 13 | 231.4/356.4 = 64.9%<br>(31.9%, 88.0%)   | 321/356.4 = 90.1%<br>(46.7%, 98.9%)      | 321/356.4 = 90.1%<br>(46.7%, 98.9%)     |
| Chile    | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1  | 0/9.1 = 0.0%                            | 0/9.1 = 0.0%                             | 0/9.1 = 0.0%                            |
| Chile    | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0/9.1 = 0.0%                            | 0/9.1 = 0.0%                             | 0/9.1 = 0.0%                            |
| Chile    | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0/9.1 = 0.0%                            | 0/9.1 = 0.0%                             | 0/9.1 = 0.0%                            |
| Chile    | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0/430.3 = 0.0%                          | 0/430.3 = 0.0%                           | 0/430.3 = 0.0%                          |
| Chile    | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1  | 0/430.3 = 0.0%                          | 0/430.3 = 0.0%                           | 0/430.3 = 0.0%                          |
| Chile    | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1  | 0/430.3 = 0.0%                          | 0/430.3 = 0.0%                           | 0/430.3 = 0.0%                          |
| Chile    | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 1  | 0/13.9 = 0.0%                           | 0/13.9 = 0.0%                            | 0/13.9 = 0.0%                           |
| Chile    | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0/13.9 = 0.0%                           | 0/13.9 = 0.0%                            | 0/13.9 = 0.0%                           |
| Chile    | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0/13.9 = 0.0%                           | 0/13.9 = 0.0%                            | 0/13.9 = 0.0%                           |
| Columbia | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 64 | 37.5/2092.3 = 1.8%<br>(0.4%, 7.1%)      | 353.2/2092.3 = 16.9%<br>(9.5%, 28.1%)    | 167.5/2092.3 = 8.0%<br>(3.7%, 16.6%)    |
| Columbia | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 64 | 1162.5/2092.3 = 55.6%<br>(42.0%, 68.3%) | 1551.9/2092.3 = 74.2%<br>(60.2%, 84.5%)  | 1309.1/2092.3 = 62.6%<br>(48.7%, 74.6%) |
| Columbia | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 64 | 820.6/2092.3 = 39.2%<br>(27.5%, 52.3%)  | 1774.3/2092.3 = 84.8%<br>(70.6%, 92.8%)  | 1585.6/2092.3 = 75.8%<br>(61.6%, 85.9%) |
| Columbia | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 20 | 36.1/250.4 = 14.4%<br>(3.9%, 41.2%)     | 71.9/250.4 = 28.7%<br>(11.3%, 56.1%)     | 54/250.4 = 21.6%<br>(7.2%, 49.4%)       |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                             | % 2-Fold Rise                            | % 4-Fold Rise                         |
|----------|--------|---------|---------------------|-------------------------|----|---------------------------------------|--|---------------------------------------|
| Columbia | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 20 | 202.5/250.4 = 80.9%<br>(51.6%, 94.4%) | 232.5/250.4 = 92.9%<br>(58.6%, 99.2%)    | 214.7/250.4 = 85.7%<br>(54.9%, 96.7%) |
| Columbia | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 20 | 103.2/250.4 = 41.2%<br>(20.9%, 65.0%) | 250.4/250.4 = 100.0%<br>(100.0%, 100.0%) | 232.5/250.4 = 92.9%<br>(58.6%, 99.2%) |
| Columbia | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 3  | 0/796.6 = 0.0%                        | 0/796.6 = 0.0%                           | 0/796.6 = 0.0%                        |
| Columbia | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 3  | 0/796.6 = 0.0%                        | 0/796.6 = 0.0%                           | 0/796.6 = 0.0%                        |
| Columbia | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 3  | 0/796.6 = 0.0%                        | 0/796.6 = 0.0%                           | 0/796.6 = 0.0%                        |
| Columbia | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 13 | 10.1/176.2 = 5.7%<br>(0.6%, 39.3%)    | 23.3/176.2 = 13.2%<br>(3.3%, 40.4%)      | 16.7/176.2 = 9.5%<br>(1.7%, 38.2%)    |
| Columbia | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 13 | 54.6/176.2 = 31.0%<br>(10.8%, 62.5%)  | 118.3/176.2 = 67.2%<br>(32.4%, 89.7%)    | 99.1/176.2 = 56.2%<br>(26.8%, 81.9%)  |
| Columbia | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 13 | 61.2/176.2 = 34.7%<br>(13.0%, 65.5%)  | 99.1/176.2 = 56.2%<br>(26.8%, 81.9%)     | 88.9/176.2 = 50.5%<br>(23.1%, 77.6%)  |
| Mexico   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 9  | 0/331.2 = 0.0%<br>(0.0%, 0.0%)        | 47.3/331.2 = 14.3%<br>(2.0%, 57.8%)      | 28.5/331.2 = 8.6%<br>(0.6%, 59.3%)    |
| Mexico   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 9  | 153.3/331.2 = 46.3%<br>(12.1%, 84.3%) | 242.8/331.2 = 73.3%<br>(24.4%, 95.9%)    | 153.3/331.2 = 46.3%<br>(12.1%, 84.3%) |
| Mexico   | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 9  | 153.3/331.2 = 46.3%<br>(12.1%, 84.3%) | 260.4/331.2 = 78.6%<br>(31.4%, 96.7%)    | 260.4/331.2 = 78.6%<br>(31.4%, 96.7%) |
| Mexico   | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 4  | 7.3/38.9 = 18.7%<br>(0.2%, 97.2%)     | 7.3/38.9 = 18.7%<br>(0.2%, 97.2%)        | 7.3/38.9 = 18.7%<br>(0.2%, 97.2%)     |
| Mexico   | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 4  | 26.8/38.9 = 68.7%<br>(1.3%, 99.7%)    | 38.9/38.9 = 100.0%<br>(100.0%, 100.0%)   | 26.8/38.9 = 68.7%<br>(1.3%, 99.7%)    |
| Mexico   | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 4  | 26.8/38.9 = 68.7%<br>(1.3%, 99.7%)    | 38.9/38.9 = 100.0%<br>(100.0%, 100.0%)   | 26.8/38.9 = 68.7%<br>(1.3%, 99.7%)    |
| Mexico   | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0/347.2 = 0.0%                        | 0/347.2 = 0.0%                           | 0/347.2 = 0.0%                        |
| Mexico   | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1  | 0/347.2 = 0.0%                        | 0/347.2 = 0.0%                           | 0/347.2 = 0.0%                        |
| Mexico   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1  | 0/347.2 = 0.0%                        | 0/347.2 = 0.0%                           | 0/347.2 = 0.0%                        |
| Mexico   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 5  | 0/69.2 = 0.0%                         | 0/69.2 = 0.0%                            | 0/69.2 = 0.0%                         |
| Mexico   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 5  | 36/69.2 = 52.1%                       | 69.2/69.2 = 100.0%                       | 36/69.2 = 52.1%                       |
| Mexico   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5  | 6.6/69.2 = 9.6%                       | 69.2/69.2 = 100.0%                       | 55.3/69.2 = 79.9%                     |

(continued)

| Group        | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                              | % 2-Fold Rise                          | % 4-Fold Rise                          |
|--------------|--------|---------|---------------------|-------------------------|-----|--|--|--|
| Peru         | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 19  | 18.8/729 = 2.6%<br>(0.3%, 19.1%)       | 206.3/729 = 28.3%<br>(10.8%, 56.3%)    | 47.3/729 = 6.5%<br>(1.3%, 26.1%)       |
| Peru         | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 19  | 469.7/729 = 64.4%<br>(37.4%, 84.6%)    | 570/729 = 78.2%<br>(48.0%, 93.3%)      | 469.7/729 = 64.4%<br>(37.4%, 84.6%)    |
| Peru         | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 19  | 434.3/729 = 59.6%<br>(33.5%, 81.2%)    | 676/729 = 92.7%<br>(58.3%, 99.1%)      | 575.7/729 = 79.0%<br>(50.8%, 93.2%)    |
| Peru         | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 6   | 14.6/62.9 = 23.2%<br>(0.7%, 92.5%)     | 26.8/62.9 = 42.6%<br>(1.9%, 96.6%)     | 14.6/62.9 = 23.2%<br>(0.7%, 92.5%)     |
| Peru         | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 6   | 62.9/62.9 = 100.0%<br>(100.0%, 100.0%) | 62.9/62.9 = 100.0%<br>(100.0%, 100.0%) | 62.9/62.9 = 100.0%<br>(100.0%, 100.0%) |
| Peru         | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 6   | 62.9/62.9 = 100.0%<br>(100.0%, 100.0%) | 62.9/62.9 = 100.0%<br>(100.0%, 100.0%) | 62.9/62.9 = 100.0%<br>(100.0%, 100.0%) |
| Peru         | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1   | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         |
| Peru         | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1   | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         |
| Peru         | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1   | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         | 0/347.2 = 0.0%                         |
| Peru         | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 5   | 0/49.2 = 0.0%<br>(0.0%, 0.0%)          | 13.2/49.2 = 26.9%<br>(0.6%, 95.5%)     | 6.6/49.2 = 13.4%<br>(0.1%, 95.7%)      |
| Peru         | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 5   | 23.3/49.2 = 47.4%<br>(1.3%, 98.4%)     | 29.9/49.2 = 60.8%<br>(1.3%, 99.5%)     | 29.9/49.2 = 60.8%<br>(1.3%, 99.5%)     |
| Peru         | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5   | 29.9/49.2 = 60.8%<br>(1.3%, 99.5%)     | 29.9/49.2 = 60.8%<br>(1.3%, 99.5%)     | 29.9/49.2 = 60.8%<br>(1.3%, 99.5%)     |
| South Africa | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 231 | 203/2951 = 6.9%<br>(4.3%, 10.8%)       | 660.7/2951 = 22.4%<br>(17.5%, 28.2%)   | 436.7/2951 = 14.8%<br>(10.8%, 19.9%)   |
| South Africa | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 231 | 1514.8/2951 = 51.3%<br>(44.8%, 57.8%)  | 2232.2/2951 = 75.6%<br>(69.1%, 81.2%)  | 1719.7/2951 = 58.3%<br>(51.6%, 64.7%)  |
| South Africa | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 231 | 1373.6/2951 = 46.5%<br>(40.1%, 53.1%)  | 2494/2951 = 84.5%<br>(78.5%, 89.1%)    | 2120.7/2951 = 71.9%<br>(65.1%, 77.8%)  |
| South Africa | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 70  | 35.3/295 = 12.0%<br>(6.3%, 21.7%)      | 112.8/295 = 38.2%<br>(27.1%, 50.8%)    | 86.3/295 = 29.3%<br>(19.6%, 41.3%)     |
| South Africa | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 205.3/295 = 69.6%<br>(56.3%, 80.3%)    | 247.4/295 = 83.9%<br>(71.5%, 91.5%)    | 211.7/295 = 71.7%<br>(58.6%, 82.0%)    |

(continued)

| Group        | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                           | % 2-Fold Rise                       | % 4-Fold Rise                       |
|--------------|--------|---------|---------------------|-------------------------|----|-------------------------------------|-------------------------------------|-------------------------------------|
| South Africa | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 70 | 174.7/295 = 59.2%<br>(46.1%, 71.2%) | 283.5/295 = 96.1%<br>(85.0%, 99.1%) | 264.7/295 = 89.7%<br>(78.7%, 95.4%) |
| South Africa | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 27 | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       |
| South Africa | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 27 | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       |
| South Africa | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 27 | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       | 0/2863 = 0.0%<br>(0.0%, 0.0%)       |
| South Africa | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69 | 16/252 = 6.4%<br>(2.2%, 16.8%)      | 62.6/252 = 24.9%<br>(15.8%, 36.8%)  | 36.6/252 = 14.5%<br>(8.0%, 25.0%)   |
| South Africa | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69 | 127.1/252 = 50.4%<br>(37.4%, 63.4%) | 172.8/252 = 68.6%<br>(54.6%, 79.8%) | 149.4/252 = 59.3%<br>(46.0%, 71.4%) |
| South Africa | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69 | 107.2/252 = 42.6%<br>(30.3%, 55.8%) | 209.9/252 = 83.3%<br>(70.1%, 91.4%) | 167.4/252 = 66.4%<br>(52.5%, 78.0%) |

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 6l. Percentage of responders, and participants with 2-fold rise, and participants with 4-fold rise for binding antibody markers by HIV Infection

| Group                | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Responder                                | % 2-Fold Rise                             | % 4-Fold Rise                             |
|----------------------|--------|---------|---------------------|-------------------------|-----|--|---|---|
| <b>HIV Infection</b> |        |         |                     |                         |     |  |   |   |
| Negative             | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 848 | 1075.4/18035.1 = 6.0%<br>(4.6%, 7.6%)    | 4652.1/18035.1 = 25.8%<br>(22.7%, 29.1%)  | 2825.9/18035.1 = 15.7%<br>(13.4%, 18.3%)  |
| Negative             | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 848 | 9909.2/18035.1 = 54.9%<br>(51.2%, 58.6%) | 14493.5/18035.1 = 80.4%<br>(77.1%, 83.3%) | 11346.4/18035.1 = 62.9%<br>(59.2%, 66.5%) |
| Negative             | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 848 | 8785.2/18035.1 = 48.7%<br>(45.1%, 52.4%) | 15658.3/18035.1 = 86.8%<br>(83.8%, 89.3%) | 13786/18035.1 = 76.4%<br>(73.0%, 79.6%)   |
| Negative             | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 265 | 201.3/1980.7 = 10.2%<br>(7.0%, 14.6%)    | 696/1980.7 = 35.1%<br>(29.2%, 41.6%)      | 457.7/1980.7 = 23.1%<br>(18.1%, 29.0%)    |
| Negative             | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 265 | 1475.1/1980.7 = 74.5%<br>(68.0%, 80.0%)  | 1751.7/1980.7 = 88.4%<br>(83.1%, 92.3%)   | 1584.8/1980.7 = 80.0%<br>(73.9%, 85.0%)   |
| Negative             | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 265 | 1217.1/1980.7 = 61.4%<br>(54.6%, 67.9%)  | 1888.3/1980.7 = 95.3%<br>(91.5%, 97.5%)   | 1731.2/1980.7 = 87.4%<br>(81.7%, 91.5%)   |
| Negative             | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 100 | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)         | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          |
| Negative             | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 100 | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)         | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          |
| Negative             | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 100 | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)         | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          | 0/18198.3 = 0.0%<br>(0.0%, 0.0%)          |
| Negative             | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 266 | 51.4/1886.3 = 2.7%<br>(1.4%, 5.2%)       | 385.7/1886.3 = 20.4%<br>(16.2%, 25.5%)    | 190.7/1886.3 = 10.1%<br>(7.3%, 13.9%)     |
| Negative             | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 266 | 722.7/1886.3 = 38.3%<br>(32.2%, 44.8%)   | 1237.4/1886.3 = 65.6%<br>(58.6%, 72.0%)   | 944.8/1886.3 = 50.1%<br>(43.4%, 56.8%)    |
| Negative             | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 266 | 609/1886.3 = 32.3%<br>(26.8%, 38.3%)     | 1380.3/1886.3 = 73.2%<br>(66.2%, 79.2%)   | 1118.4/1886.3 = 59.3%<br>(52.4%, 65.9%)   |
| Positive             | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 65  | 72.5/1256.9 = 5.8%<br>(2.2%, 14.3%)      | 258.8/1256.9 = 20.6%<br>(12.2%, 32.6%)    | 179.2/1256.9 = 14.3%<br>(7.4%, 25.7%)     |
| Positive             | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 65  | 586.6/1256.9 = 46.7%<br>(32.9%, 61.0%)   | 776.9/1256.9 = 61.8%<br>(46.6%, 75.0%)    | 626.1/1256.9 = 49.8%<br>(35.7%, 63.9%)    |
| Positive             | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 65  | 440.5/1256.9 = 35.0%<br>(23.1%, 49.1%)   | 934.1/1256.9 = 74.3%<br>(58.7%, 85.5%)    | 763.4/1256.9 = 60.7%<br>(45.9%, 73.9%)    |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Responder                            | % 2-Fold Rise                            | % 4-Fold Rise                         |
|----------|--------|---------|---------------------|-------------------------|----|--------------------------------------|--|---------------------------------------|
| Positive | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 18 | 20.7/121.3 = 17.1%<br>(3.8%, 51.9%)  | 44.9/121.3 = 37.0%<br>(14.4%, 67.3%)     | 34.3/121.3 = 28.3%<br>(9.8%, 58.9%)   |
| Positive | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 18 | 94/121.3 = 77.5%<br>(46.3%, 93.2%)   | 121.3/121.3 = 100.0%<br>(100.0%, 100.0%) | 100.3/121.3 = 82.7%<br>(50.5%, 95.7%) |
| Positive | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 18 | 93.4/121.3 = 77.0%<br>(41.7%, 94.0%) | 116.1/121.3 = 95.7%<br>(67.9%, 99.6%)    | 116.1/121.3 = 95.7%<br>(67.9%, 99.6%) |
| Positive | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 9  | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)      | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)          | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)       |
| Positive | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 9  | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)      | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)          | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)       |
| Positive | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 9  | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)      | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)          | 0/1134.7 = 0.0%<br>(0.0%, 0.0%)       |
| Positive | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 14 | 10.1/92.7 = 10.9%<br>(1.0%, 58.7%)   | 14.2/92.7 = 15.3%<br>(2.6%, 55.3%)       | 12.8/92.7 = 13.8%<br>(2.0%, 56.0%)    |
| Positive | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 14 | 30.4/92.7 = 32.8%<br>(9.8%, 68.6%)   | 62.9/92.7 = 67.8%<br>(24.3%, 93.3%)      | 36.4/92.7 = 39.3%<br>(12.7%, 74.2%)   |
| Positive | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 14 | 27.7/92.7 = 29.9%<br>(8.4%, 66.4%)   | 49.7/92.7 = 53.6%<br>(18.4%, 85.5%)      | 38.3/92.7 = 41.2%<br>(13.5%, 76.0%)   |

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.

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

Table 7a. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by All participants

| Group                   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC              |
|-------------------------|--------|---------|---------------------|-------------------------|-----|----------------------|
| <b>All participants</b> |        |         |                     |                         |     |                      |
|                         | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 913 | 0.05<br>(0.05, 0.05) |
|                         | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 913 | 0.80<br>(0.80, 0.80) |
|                         | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 913 | 0.15<br>(0.15, 0.15) |
|                         | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 283 | 0.05<br>(0.05, 0.05) |
|                         | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 283 | 0.80<br>(0.79, 0.81) |
|                         | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 283 | 0.15<br>(0.15, 0.15) |
|                         | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 109 | 0.05<br>(0.05, 0.05) |
|                         | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 109 | 0.80<br>(0.80, 0.80) |
|                         | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 109 | 0.15<br>(0.15, 0.15) |
|                         | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 280 | 0.05<br>(0.05, 0.05) |
|                         | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 280 | 0.80<br>(0.79, 0.80) |
|                         | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 280 | 0.15<br>(0.15, 0.15) |
|                         | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 913 | 1.41<br>(1.24, 1.59) |

(continued)

| Group | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|-------|--------|---------|---------------------|-------------------------|-----|-------------------------|
|       | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 913 | 17.09<br>(15.39, 18.96) |
|       | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 913 | 9.28<br>(8.44, 10.21)   |
|       | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 283 | 2.52<br>(2.00, 3.19)    |
|       | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 283 | 30.05<br>(25.07, 36.02) |
|       | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 283 | 14.92<br>(12.80, 17.39) |
|       | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 109 | 0.05<br>(0.05, 0.05)    |
|       | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 109 | 0.80<br>(0.80, 0.80)    |
|       | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 109 | 0.15<br>(0.15, 0.15)    |
|       | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 280 | 0.87<br>(0.70, 1.09)    |
|       | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 280 | 9.52<br>(7.86, 11.52)   |
|       | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 280 | 5.00<br>(4.20, 5.95)    |

Table 7b. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age

| Group       | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                |
|-------------|--------|---------|---------------------|-------------------------|-----|------------------------|
| <b>Age</b>  |        |         |                     |                         |     |                        |
| Age 18 - 59 | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 453 | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 453 | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 453 | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 141 | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 141 | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 54  | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 54  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 54  | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 139 | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 139 | 0.80<br>(0.79, 0.81)   |
| Age 18 - 59 | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 139 | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 453 | 0.94<br>(0.80, 1.11)   |
| Age 18 - 59 | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 453 | 10.80<br>(9.40, 12.41) |
| Age 18 - 59 | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 453 | 6.06<br>(5.32, 6.91)   |

(continued)

| Group         | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Age 18 - 59   | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 141 | 1.76<br>(1.29, 2.41)    |
| Age 18 - 59   | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 20.39<br>(16.05, 25.89) |
| Age 18 - 59   | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 141 | 10.36<br>(8.49, 12.65)  |
| Age 18 - 59   | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 54  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59   | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 54  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 54  | 0.15<br>(0.15, 0.15)    |
| Age 18 - 59   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 139 | 0.52<br>(0.39, 0.69)    |
| Age 18 - 59   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 139 | 5.48<br>(4.31, 6.98)    |
| Age 18 - 59   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 139 | 2.84<br>(2.26, 3.57)    |
| Age $\geq$ 60 | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 460 | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 460 | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 460 | 0.15<br>(0.15, 0.15)    |
| Age $\geq$ 60 | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 142 | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 142 | 0.81<br>(0.78, 0.84)    |
| Age $\geq$ 60 | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 142 | 0.15<br>(0.15, 0.15)    |

(continued)

| Group         | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Age $\geq$ 60 | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 55  | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 55  | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 55  | 0.15<br>(0.15, 0.15)    |
| Age $\geq$ 60 | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 0.15<br>(0.15, 0.15)    |
| Age $\geq$ 60 | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 460 | 2.98<br>(2.49, 3.57)    |
| Age $\geq$ 60 | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 460 | 40.62<br>(35.11, 47.01) |
| Age $\geq$ 60 | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 460 | 20.78<br>(18.47, 23.38) |
| Age $\geq$ 60 | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 142 | 5.00<br>(3.66, 6.83)    |
| Age $\geq$ 60 | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 142 | 63.07<br>(48.83, 81.48) |
| Age $\geq$ 60 | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 142 | 29.97<br>(23.96, 37.48) |
| Age $\geq$ 60 | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 55  | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 55  | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 55  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group         | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Age $\geq$ 60 | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 2.46<br>(1.77, 3.42)    |
| Age $\geq$ 60 | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 28.45<br>(21.21, 38.17) |
| Age $\geq$ 60 | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 15.36<br>(12.18, 19.37) |

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                 |
|---------------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| <b>Risk for Severe Covid-19</b> |        |         |                     |                         |     |                         |
| At-risk                         | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 454 | 0.05<br>(0.05, 0.05)    |
| At-risk                         | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 454 | 0.80<br>(0.80, 0.80)    |
| At-risk                         | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 454 | 0.15<br>(0.15, 0.15)    |
| At-risk                         | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 140 | 0.05<br>(0.05, 0.05)    |
| At-risk                         | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 140 | 0.80<br>(0.80, 0.80)    |
| At-risk                         | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 140 | 0.15<br>(0.15, 0.15)    |
| At-risk                         | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 53  | 0.05<br>(0.05, 0.05)    |
| At-risk                         | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 53  | 0.80<br>(0.80, 0.80)    |
| At-risk                         | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 53  | 0.15<br>(0.15, 0.15)    |
| At-risk                         | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 0.05<br>(0.05, 0.05)    |
| At-risk                         | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 0.80<br>(0.80, 0.80)    |
| At-risk                         | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 0.15<br>(0.15, 0.15)    |
| At-risk                         | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 454 | 1.34<br>(1.12, 1.59)    |
| At-risk                         | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 454 | 17.44<br>(15.14, 20.09) |
| At-risk                         | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 454 | 9.51<br>(8.27, 10.93)   |

(continued)

| Group       | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|-------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| At-risk     | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 140 | 2.53<br>(1.88, 3.39)    |
| At-risk     | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 140 | 34.36<br>(27.39, 43.11) |
| At-risk     | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 140 | 15.52<br>(12.72, 18.95) |
| At-risk     | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 53  | 0.05<br>(0.05, 0.05)    |
| At-risk     | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 53  | 0.80<br>(0.80, 0.80)    |
| At-risk     | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 53  | 0.15<br>(0.15, 0.15)    |
| At-risk     | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 1.16<br>(0.86, 1.56)    |
| At-risk     | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 12.07<br>(9.52, 15.31)  |
| At-risk     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 6.30<br>(5.07, 7.82)    |
| Not at-risk | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 459 | 0.05<br>(0.05, 0.05)    |
| Not at-risk | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 459 | 0.80<br>(0.80, 0.80)    |
| Not at-risk | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 459 | 0.15<br>(0.15, 0.15)    |
| Not at-risk | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 143 | 0.05<br>(0.05, 0.05)    |
| Not at-risk | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 143 | 0.80<br>(0.79, 0.82)    |
| Not at-risk | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 143 | 0.15<br>(0.15, 0.15)    |

(continued)

| Group       | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|-------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Not at-risk | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0.05<br>(0.05, 0.05)    |
| Not at-risk | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0.80<br>(0.80, 0.80)    |
| Not at-risk | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0.15<br>(0.15, 0.15)    |
| Not at-risk | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 139 | 0.05<br>(0.05, 0.05)    |
| Not at-risk | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 139 | 0.80<br>(0.79, 0.81)    |
| Not at-risk | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 139 | 0.15<br>(0.15, 0.15)    |
| Not at-risk | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 459 | 1.45<br>(1.23, 1.72)    |
| Not at-risk | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 459 | 16.85<br>(14.56, 19.50) |
| Not at-risk | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 459 | 9.14<br>(8.03, 10.39)   |
| Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 143 | 2.52<br>(1.80, 3.53)    |
| Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 143 | 27.41<br>(21.07, 35.65) |
| Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 143 | 14.52<br>(11.67, 18.08) |
| Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0.05<br>(0.05, 0.05)    |
| Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0.80<br>(0.80, 0.80)    |
| Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group       | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC               |
|-------------|--------|---------|---------------------|-------------------------|-----|-----------------------|
| Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 139 | 0.72<br>(0.52, 0.98)  |
| Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 139 | 8.11<br>(6.15, 10.70) |
| Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 139 | 4.29<br>(3.33, 5.51)  |

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                |
|--------------------------------------|--------|---------|---------------------|-------------------------|-----|------------------------|
| <b>Age, Risk for Severe Covid-19</b> |        |         |                     |                         |     |                        |
| Age 18 - 59 At-risk                  | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 226 | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 At-risk                  | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 226 | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 At-risk                  | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 226 | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 At-risk                  | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 69  | 0.05<br>(0.05, 0.06)   |
| Age 18 - 59 At-risk                  | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 At-risk                  | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 69  | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 At-risk                  | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 26  | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 At-risk                  | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 26  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 At-risk                  | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 26  | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 At-risk                  | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69  | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 At-risk                  | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 At-risk                  | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69  | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 226 | 0.88<br>(0.70, 1.11)   |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 226 | 11.21<br>(9.32, 13.48) |
| Age 18 - 59 At-risk                  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 226 | 6.37<br>(5.24, 7.73)   |

(continued)

| Group                   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|-------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Age 18 - 59 At-risk     | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 69  | 1.80<br>(1.22, 2.64)    |
| Age 18 - 59 At-risk     | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 24.92<br>(18.62, 33.36) |
| Age 18 - 59 At-risk     | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 69  | 10.40<br>(7.91, 13.67)  |
| Age 18 - 59 At-risk     | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 26  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 At-risk     | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 26  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 At-risk     | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 26  | 0.15<br>(0.15, 0.15)    |
| Age 18 - 59 At-risk     | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69  | 0.66<br>(0.45, 0.98)    |
| Age 18 - 59 At-risk     | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 7.06<br>(5.28, 9.43)    |
| Age 18 - 59 At-risk     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69  | 3.41<br>(2.58, 4.52)    |
| Age 18 - 59 Not at-risk | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Not at-risk | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Not at-risk | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 0.15<br>(0.15, 0.15)    |
| Age 18 - 59 Not at-risk | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 72  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Not at-risk | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 72  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Not at-risk | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 72  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group                   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|-------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Age 18 - 59 Not at-risk | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Not at-risk | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Not at-risk | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0.15<br>(0.15, 0.15)    |
| Age 18 - 59 Not at-risk | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 70  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Not at-risk | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 0.80<br>(0.79, 0.81)    |
| Age 18 - 59 Not at-risk | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 70  | 0.15<br>(0.15, 0.15)    |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 0.99<br>(0.79, 1.23)    |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 10.54<br>(8.66, 12.82)  |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 5.86<br>(4.92, 6.99)    |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 72  | 1.74<br>(1.10, 2.75)    |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 72  | 17.82<br>(12.58, 25.23) |
| Age 18 - 59 Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 72  | 10.34<br>(7.83, 13.65)  |
| Age 18 - 59 Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group                   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC              |
|-------------------------|--------|---------|---------------------|-------------------------|-----|----------------------|
| Age 18 - 59 Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 70  | 0.44<br>(0.29, 0.65) |
| Age 18 - 59 Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 4.62<br>(3.24, 6.58) |
| Age 18 - 59 Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 70  | 2.51<br>(1.80, 3.50) |
| Age $\geq$ 60 At-risk   | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 228 | 0.05<br>(0.05, 0.05) |
| Age $\geq$ 60 At-risk   | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 228 | 0.80<br>(0.80, 0.80) |
| Age $\geq$ 60 At-risk   | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 228 | 0.15<br>(0.15, 0.15) |
| Age $\geq$ 60 At-risk   | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 0.05<br>(0.05, 0.05) |
| Age $\geq$ 60 At-risk   | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 0.80<br>(0.80, 0.80) |
| Age $\geq$ 60 At-risk   | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 0.15<br>(0.15, 0.15) |
| Age $\geq$ 60 At-risk   | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 27  | 0.05<br>(0.05, 0.05) |
| Age $\geq$ 60 At-risk   | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 27  | 0.80<br>(0.80, 0.80) |
| Age $\geq$ 60 At-risk   | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 27  | 0.15<br>(0.15, 0.15) |
| Age $\geq$ 60 At-risk   | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 72  | 0.05<br>(0.05, 0.06) |
| Age $\geq$ 60 At-risk   | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 72  | 0.80<br>(0.80, 0.80) |
| Age $\geq$ 60 At-risk   | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 72  | 0.15<br>(0.15, 0.16) |

(continued)

| Group                     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Age $\geq$ 60 At-risk     | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 228 | 2.93<br>(2.27, 3.79)    |
| Age $\geq$ 60 At-risk     | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 228 | 40.07<br>(32.47, 49.44) |
| Age $\geq$ 60 At-risk     | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 228 | 20.22<br>(17.20, 23.77) |
| Age $\geq$ 60 At-risk     | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 4.73<br>(3.07, 7.28)    |
| Age $\geq$ 60 At-risk     | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 62.08<br>(43.89, 87.80) |
| Age $\geq$ 60 At-risk     | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 32.45<br>(25.59, 41.17) |
| Age $\geq$ 60 At-risk     | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 27  | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 At-risk     | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 27  | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 At-risk     | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 27  | 0.15<br>(0.15, 0.15)    |
| Age $\geq$ 60 At-risk     | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 72  | 3.60<br>(2.43, 5.33)    |
| Age $\geq$ 60 At-risk     | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 72  | 35.83<br>(24.46, 52.47) |
| Age $\geq$ 60 At-risk     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 72  | 21.81<br>(16.61, 28.64) |
| Age $\geq$ 60 Not at-risk | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 232 | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 Not at-risk | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 232 | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 Not at-risk | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 232 | 0.15<br>(0.15, 0.15)    |

(continued)

| Group                     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Age $\geq$ 60 Not at-risk | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 Not at-risk | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 0.82<br>(0.78, 0.87)    |
| Age $\geq$ 60 Not at-risk | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 0.15<br>(0.15, 0.15)    |
| Age $\geq$ 60 Not at-risk | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 Not at-risk | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 Not at-risk | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0.15<br>(0.15, 0.15)    |
| Age $\geq$ 60 Not at-risk | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69  | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 Not at-risk | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 Not at-risk | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69  | 0.15<br>(0.15, 0.15)    |
| Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 232 | 3.02<br>(2.36, 3.86)    |
| Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 232 | 41.01<br>(33.61, 50.04) |
| Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 232 | 21.17<br>(17.96, 24.94) |
| Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 5.21<br>(3.36, 8.07)    |
| Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 63.79<br>(44.40, 91.66) |
| Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 28.30<br>(20.07, 39.92) |

(continued)

| Group                     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                 |
|---------------------------|--------|---------|---------------------|-------------------------|----|-------------------------|
| Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28 | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28 | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28 | 0.15<br>(0.15, 0.15)    |
| Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69 | 1.91<br>(1.19, 3.09)    |
| Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69 | 24.45<br>(16.12, 37.10) |
| Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69 | 12.20<br>(8.69, 17.11)  |

Table 7e. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Sex

| Group      | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| <b>Sex</b> |        |         |                     |                         |     |                         |
| Male       | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 416 | 0.05<br>(0.05, 0.05)    |
| Male       | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 416 | 0.80<br>(0.80, 0.80)    |
| Male       | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 416 | 0.15<br>(0.15, 0.15)    |
| Male       | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 123 | 0.05<br>(0.05, 0.05)    |
| Male       | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 123 | 0.80<br>(0.80, 0.80)    |
| Male       | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 123 | 0.15<br>(0.15, 0.15)    |
| Male       | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 55  | 0.05<br>(0.05, 0.05)    |
| Male       | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 55  | 0.80<br>(0.80, 0.80)    |
| Male       | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 55  | 0.15<br>(0.15, 0.15)    |
| Male       | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 126 | 0.05<br>(0.05, 0.05)    |
| Male       | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 126 | 0.80<br>(0.79, 0.81)    |
| Male       | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 126 | 0.15<br>(0.15, 0.15)    |
| Male       | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 416 | 1.43<br>(1.19, 1.72)    |
| Male       | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 416 | 17.21<br>(14.63, 20.24) |
| Male       | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 416 | 9.36<br>(8.08, 10.84)   |

(continued)

| Group  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|--------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Male   | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 123 | 2.88<br>(1.96, 4.24)    |
| Male   | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 123 | 31.72<br>(23.68, 42.49) |
| Male   | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 123 | 16.03<br>(12.43, 20.69) |
| Male   | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 55  | 0.05<br>(0.05, 0.05)    |
| Male   | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 55  | 0.80<br>(0.80, 0.80)    |
| Male   | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 55  | 0.15<br>(0.15, 0.15)    |
| Male   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 126 | 0.88<br>(0.61, 1.27)    |
| Male   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 126 | 9.77<br>(7.11, 13.44)   |
| Male   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 126 | 5.33<br>(4.08, 6.96)    |
| Female | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 497 | 0.05<br>(0.05, 0.05)    |
| Female | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 497 | 0.80<br>(0.80, 0.80)    |
| Female | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 497 | 0.15<br>(0.15, 0.15)    |
| Female | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 160 | 0.05<br>(0.05, 0.05)    |
| Female | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 160 | 0.80<br>(0.79, 0.82)    |
| Female | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 160 | 0.15<br>(0.15, 0.15)    |

(continued)

| Group  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|--------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Female | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 54  | 0.05<br>(0.05, 0.05)    |
| Female | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 54  | 0.80<br>(0.80, 0.80)    |
| Female | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 54  | 0.15<br>(0.15, 0.15)    |
| Female | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 154 | 0.05<br>(0.05, 0.05)    |
| Female | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 154 | 0.80<br>(0.80, 0.80)    |
| Female | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 154 | 0.15<br>(0.15, 0.15)    |
| Female | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 497 | 1.38<br>(1.17, 1.64)    |
| Female | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 497 | 16.98<br>(14.69, 19.63) |
| Female | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 497 | 9.22<br>(8.06, 10.54)   |
| Female | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 160 | 2.30<br>(1.70, 3.09)    |
| Female | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 160 | 28.91<br>(22.56, 37.04) |
| Female | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 160 | 14.17<br>(11.60, 17.32) |
| Female | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 54  | 0.05<br>(0.05, 0.05)    |
| Female | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 54  | 0.80<br>(0.80, 0.80)    |
| Female | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 54  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC               |
|--------|--------|---------|---------------------|-------------------------|-----|-----------------------|
| Female | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 154 | 0.87<br>(0.63, 1.18)  |
| Female | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 154 | 9.31<br>(7.08, 12.24) |
| Female | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 154 | 4.75<br>(3.65, 6.18)  |

MOCK

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                |
|--------------------|--------|---------|---------------------|-------------------------|-----|------------------------|
| <b>Age, sex</b>    |        |         |                     |                         |     |                        |
| Age 18 - 59 Female | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 238 | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 Female | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 238 | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 Female | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 238 | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 Female | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 79  | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 Female | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 79  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 Female | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 79  | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 Female | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 23  | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 Female | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 23  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 Female | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 23  | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 Female | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 73  | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 Female | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 73  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 Female | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 73  | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 Female | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 238 | 0.91<br>(0.73, 1.13)   |
| Age 18 - 59 Female | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 238 | 10.17<br>(8.45, 12.25) |
| Age 18 - 59 Female | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 238 | 5.84<br>(4.88, 6.98)   |

(continued)

| Group              | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|--------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Age 18 - 59 Female | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 79  | 1.66<br>(1.12, 2.46)    |
| Age 18 - 59 Female | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 79  | 19.70<br>(14.23, 27.28) |
| Age 18 - 59 Female | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 79  | 10.12<br>(7.91, 12.94)  |
| Age 18 - 59 Female | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 23  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Female | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 23  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Female | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 23  | 0.15<br>(0.15, 0.15)    |
| Age 18 - 59 Female | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 73  | 0.50<br>(0.33, 0.75)    |
| Age 18 - 59 Female | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 73  | 5.30<br>(3.71, 7.58)    |
| Age 18 - 59 Female | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 73  | 2.63<br>(1.87, 3.69)    |
| Age 18 - 59 Male   | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 215 | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Male   | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 215 | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Male   | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 215 | 0.15<br>(0.15, 0.15)    |
| Age 18 - 59 Male   | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 62  | 0.05<br>(0.05, 0.06)    |
| Age 18 - 59 Male   | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 62  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Male   | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 62  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group            | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Age 18 - 59 Male | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 31  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Male | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 31  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Male | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 31  | 0.15<br>(0.15, 0.15)    |
| Age 18 - 59 Male | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 66  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Male | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 66  | 0.80<br>(0.79, 0.82)    |
| Age 18 - 59 Male | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 66  | 0.15<br>(0.15, 0.15)    |
| Age 18 - 59 Male | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 215 | 0.98<br>(0.77, 1.25)    |
| Age 18 - 59 Male | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 215 | 11.55<br>(9.37, 14.25)  |
| Age 18 - 59 Male | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 215 | 6.32<br>(5.22, 7.66)    |
| Age 18 - 59 Male | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 62  | 1.92<br>(1.15, 3.20)    |
| Age 18 - 59 Male | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 62  | 21.34<br>(14.85, 30.68) |
| Age 18 - 59 Male | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 62  | 10.70<br>(7.70, 14.87)  |
| Age 18 - 59 Male | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 31  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Male | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 31  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Male | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 31  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group                | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC              |
|----------------------|--------|---------|---------------------|-------------------------|-----|----------------------|
| Age 18 - 59 Male     | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 66  | 0.54<br>(0.35, 0.83) |
| Age 18 - 59 Male     | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 66  | 5.70<br>(4.04, 8.05) |
| Age 18 - 59 Male     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 66  | 3.12<br>(2.31, 4.22) |
| Age $\geq$ 60 Female | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 259 | 0.05<br>(0.05, 0.05) |
| Age $\geq$ 60 Female | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 259 | 0.80<br>(0.80, 0.80) |
| Age $\geq$ 60 Female | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 259 | 0.15<br>(0.15, 0.15) |
| Age $\geq$ 60 Female | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 81  | 0.05<br>(0.05, 0.05) |
| Age $\geq$ 60 Female | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 81  | 0.82<br>(0.78, 0.86) |
| Age $\geq$ 60 Female | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 81  | 0.15<br>(0.15, 0.15) |
| Age $\geq$ 60 Female | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 31  | 0.05<br>(0.05, 0.05) |
| Age $\geq$ 60 Female | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 31  | 0.80<br>(0.80, 0.80) |
| Age $\geq$ 60 Female | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 31  | 0.15<br>(0.15, 0.15) |
| Age $\geq$ 60 Female | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 81  | 0.05<br>(0.05, 0.05) |
| Age $\geq$ 60 Female | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 81  | 0.80<br>(0.80, 0.80) |
| Age $\geq$ 60 Female | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 81  | 0.15<br>(0.15, 0.15) |

(continued)

| Group                | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|----------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Age $\geq$ 60 Female | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 259 | 2.94<br>(2.28, 3.79)    |
| Age $\geq$ 60 Female | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 259 | 42.41<br>(34.81, 51.66) |
| Age $\geq$ 60 Female | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 259 | 20.86<br>(17.74, 24.54) |
| Age $\geq$ 60 Female | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 81  | 4.16<br>(2.76, 6.28)    |
| Age $\geq$ 60 Female | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 81  | 58.11<br>(41.55, 81.27) |
| Age $\geq$ 60 Female | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 81  | 26.18<br>(19.12, 35.85) |
| Age $\geq$ 60 Female | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 31  | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 Female | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 31  | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 Female | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 31  | 0.15<br>(0.15, 0.15)    |
| Age $\geq$ 60 Female | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 81  | 2.52<br>(1.73, 3.68)    |
| Age $\geq$ 60 Female | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 81  | 27.65<br>(20.60, 37.10) |
| Age $\geq$ 60 Female | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 81  | 14.91<br>(11.39, 19.53) |
| Age $\geq$ 60 Male   | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 201 | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 Male   | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 201 | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 Male   | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 201 | 0.15<br>(0.15, 0.15)    |

(continued)

| Group              | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                  |
|--------------------|--------|---------|---------------------|-------------------------|-----|--------------------------|
| Age $\geq$ 60 Male | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 61  | 0.05<br>(0.05, 0.05)     |
| Age $\geq$ 60 Male | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 61  | 0.80<br>(0.80, 0.80)     |
| Age $\geq$ 60 Male | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 61  | 0.15<br>(0.15, 0.15)     |
| Age $\geq$ 60 Male | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 24  | 0.05<br>(0.05, 0.05)     |
| Age $\geq$ 60 Male | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 24  | 0.80<br>(0.80, 0.80)     |
| Age $\geq$ 60 Male | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 24  | 0.15<br>(0.15, 0.15)     |
| Age $\geq$ 60 Male | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 60  | 0.05<br>(0.05, 0.05)     |
| Age $\geq$ 60 Male | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 60  | 0.80<br>(0.80, 0.80)     |
| Age $\geq$ 60 Male | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 60  | 0.15<br>(0.15, 0.16)     |
| Age $\geq$ 60 Male | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 201 | 3.03<br>(2.35, 3.91)     |
| Age $\geq$ 60 Male | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 201 | 38.47<br>(31.05, 47.65)  |
| Age $\geq$ 60 Male | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 201 | 20.68<br>(17.44, 24.52)  |
| Age $\geq$ 60 Male | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 61  | 6.59<br>(4.21, 10.32)    |
| Age $\geq$ 60 Male | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 61  | 71.36<br>(48.36, 105.31) |
| Age $\geq$ 60 Male | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 61  | 36.72<br>(27.52, 48.99)  |

(continued)

| Group              | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                 |
|--------------------|--------|---------|---------------------|-------------------------|----|-------------------------|
| Age $\geq$ 60 Male | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 24 | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 Male | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 24 | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 Male | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 24 | 0.15<br>(0.15, 0.15)    |
| Age $\geq$ 60 Male | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 60 | 2.38<br>(1.32, 4.27)    |
| Age $\geq$ 60 Male | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 60 | 29.49<br>(17.05, 51.02) |
| Age $\geq$ 60 Male | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 60 | 15.93<br>(10.61, 23.92) |

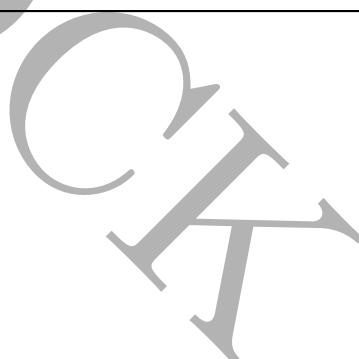


Table 7g. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Hispanic or Latino ethnicity

| Group                               | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|-------------------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| <b>Hispanic or Latino ethnicity</b> |        |         |                     |                         |     |                         |
| Hispanic or Latino                  | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 374 | 0.05<br>(0.05, 0.05)    |
| Hispanic or Latino                  | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 374 | 0.80<br>(0.80, 0.80)    |
| Hispanic or Latino                  | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 374 | 0.15<br>(0.15, 0.15)    |
| Hispanic or Latino                  | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 106 | 0.05<br>(0.05, 0.05)    |
| Hispanic or Latino                  | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 106 | 0.80<br>(0.80, 0.80)    |
| Hispanic or Latino                  | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 106 | 0.15<br>(0.15, 0.15)    |
| Hispanic or Latino                  | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 44  | 0.05<br>(0.05, 0.05)    |
| Hispanic or Latino                  | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 44  | 0.80<br>(0.80, 0.80)    |
| Hispanic or Latino                  | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 44  | 0.15<br>(0.15, 0.15)    |
| Hispanic or Latino                  | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 105 | 0.05<br>(0.05, 0.05)    |
| Hispanic or Latino                  | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 105 | 0.80<br>(0.80, 0.80)    |
| Hispanic or Latino                  | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 105 | 0.15<br>(0.15, 0.15)    |
| Hispanic or Latino                  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 374 | 1.48<br>(1.24, 1.77)    |
| Hispanic or Latino                  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 374 | 17.87<br>(15.17, 21.05) |
| Hispanic or Latino                  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 374 | 9.55<br>(8.26, 11.04)   |

(continued)

| Group                  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Hispanic or Latino     | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 106 | 2.07<br>(1.41, 3.02)    |
| Hispanic or Latino     | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 106 | 26.47<br>(19.85, 35.29) |
| Hispanic or Latino     | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 106 | 14.30<br>(11.44, 17.89) |
| Hispanic or Latino     | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 44  | 0.05<br>(0.05, 0.05)    |
| Hispanic or Latino     | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 44  | 0.80<br>(0.80, 0.80)    |
| Hispanic or Latino     | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 44  | 0.15<br>(0.15, 0.15)    |
| Hispanic or Latino     | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 105 | 0.81<br>(0.57, 1.15)    |
| Hispanic or Latino     | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 105 | 9.25<br>(6.85, 12.50)   |
| Hispanic or Latino     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 105 | 5.02<br>(3.84, 6.56)    |
| Not Hispanic or Latino | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 477 | 0.05<br>(0.05, 0.05)    |
| Not Hispanic or Latino | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 477 | 0.80<br>(0.80, 0.80)    |
| Not Hispanic or Latino | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 477 | 0.15<br>(0.15, 0.15)    |
| Not Hispanic or Latino | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 164 | 0.05<br>(0.05, 0.05)    |
| Not Hispanic or Latino | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 164 | 0.81<br>(0.79, 0.83)    |
| Not Hispanic or Latino | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 164 | 0.15<br>(0.15, 0.15)    |

(continued)

| Group                  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Not Hispanic or Latino | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0.05<br>(0.05, 0.05)    |
| Not Hispanic or Latino | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0.80<br>(0.80, 0.80)    |
| Not Hispanic or Latino | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0.15<br>(0.15, 0.15)    |
| Not Hispanic or Latino | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 152 | 0.05<br>(0.05, 0.05)    |
| Not Hispanic or Latino | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 152 | 0.80<br>(0.79, 0.81)    |
| Not Hispanic or Latino | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 152 | 0.15<br>(0.15, 0.15)    |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 477 | 1.37<br>(1.16, 1.63)    |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 477 | 16.37<br>(14.27, 18.78) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 477 | 9.23<br>(8.11, 10.50)   |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 164 | 3.09<br>(2.24, 4.24)    |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 164 | 36.03<br>(27.77, 46.75) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 164 | 15.94<br>(12.70, 20.00) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0.05<br>(0.05, 0.05)    |
| Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0.80<br>(0.80, 0.80)    |
| Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group                    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                |
|--------------------------|--------|---------|---------------------|-------------------------|-----|------------------------|
| Not Hispanic or Latino   | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 152 | 1.06<br>(0.74, 1.51)   |
| Not Hispanic or Latino   | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 152 | 10.83<br>(8.01, 14.64) |
| Not Hispanic or Latino   | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 152 | 5.11<br>(3.81, 6.86)   |
| Not reported and unknown | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 62  | 0.05<br>(0.05, 0.05)   |
| Not reported and unknown | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 62  | 0.80<br>(0.80, 0.80)   |
| Not reported and unknown | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 62  | 0.16<br>(0.15, 0.16)   |
| Not reported and unknown | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 13  | 0.05<br>(0.05, 0.05)   |
| Not reported and unknown | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 13  | 0.80<br>(0.80, 0.80)   |
| Not reported and unknown | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 13  | 0.15<br>(0.15, 0.15)   |
| Not reported and unknown | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 9   | 0.05<br>(0.05, 0.05)   |
| Not reported and unknown | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 9   | 0.80<br>(0.80, 0.80)   |
| Not reported and unknown | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 9   | 0.15<br>(0.15, 0.15)   |
| Not reported and unknown | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 23  | 0.05<br>(0.05, 0.05)   |
| Not reported and unknown | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 23  | 0.80<br>(0.80, 0.80)   |
| Not reported and unknown | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 23  | 0.15<br>(0.15, 0.15)   |

(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)     | 62 | 1.03<br>(0.60, 1.79)    |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 62 | 15.50<br>(10.38, 23.14) |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 62 | 7.49<br>(4.99, 11.25)   |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 13 | 2.45<br>(1.39, 4.30)    |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 13 | 17.50<br>(9.29, 32.94)  |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 13 | 11.83<br>(6.16, 22.73)  |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 9  | 0.05<br>(0.05, 0.05)    |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 9  | 0.80<br>(0.80, 0.80)    |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 9  | 0.15<br>(0.15, 0.15)    |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 23 | 0.53<br>(0.32, 0.89)    |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 23 | 6.17<br>(3.91, 9.75)    |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 23 | 4.41<br>(2.97, 6.55)    |

Table 7h. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Race

| Group              | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|--------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| <b>Race</b>        |        |         |                     |                         |     |                         |
| White Non-Hispanic | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 196 | 0.05<br>(0.05, 0.05)    |
| White Non-Hispanic | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 196 | 0.80<br>(0.80, 0.80)    |
| White Non-Hispanic | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 196 | 0.15<br>(0.15, 0.15)    |
| White Non-Hispanic | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 63  | 0.05<br>(0.05, 0.05)    |
| White Non-Hispanic | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 63  | 0.82<br>(0.78, 0.86)    |
| White Non-Hispanic | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 63  | 0.15<br>(0.15, 0.15)    |
| White Non-Hispanic | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 23  | 0.05<br>(0.05, 0.05)    |
| White Non-Hispanic | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 23  | 0.80<br>(0.80, 0.80)    |
| White Non-Hispanic | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 23  | 0.15<br>(0.15, 0.15)    |
| White Non-Hispanic | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 56  | 0.05<br>(0.05, 0.05)    |
| White Non-Hispanic | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 56  | 0.80<br>(0.80, 0.80)    |
| White Non-Hispanic | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 56  | 0.15<br>(0.15, 0.15)    |
| White Non-Hispanic | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 196 | 1.50<br>(1.13, 1.98)    |
| White Non-Hispanic | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 196 | 17.65<br>(14.16, 22.00) |
| White Non-Hispanic | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 196 | 9.28<br>(7.55, 11.41)   |

(continued)

| Group                     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| White Non-Hispanic        | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 63  | 3.69<br>(2.18, 6.25)    |
| White Non-Hispanic        | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 63  | 45.03<br>(30.91, 65.61) |
| White Non-Hispanic        | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 63  | 17.98<br>(12.82, 25.22) |
| White Non-Hispanic        | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 23  | 0.05<br>(0.05, 0.05)    |
| White Non-Hispanic        | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 23  | 0.80<br>(0.80, 0.80)    |
| White Non-Hispanic        | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 23  | 0.15<br>(0.15, 0.15)    |
| White Non-Hispanic        | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 56  | 1.16<br>(0.67, 2.02)    |
| White Non-Hispanic        | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 56  | 12.32<br>(7.77, 19.56)  |
| White Non-Hispanic        | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 56  | 5.02<br>(3.41, 7.38)    |
| Black or African American | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 332 | 0.05<br>(0.05, 0.05)    |
| Black or African American | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 332 | 0.80<br>(0.80, 0.80)    |
| Black or African American | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 332 | 0.15<br>(0.15, 0.15)    |
| Black or African American | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 111 | 0.05<br>(0.05, 0.05)    |
| Black or African American | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 111 | 0.80<br>(0.80, 0.80)    |
| Black or African American | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 111 | 0.15<br>(0.15, 0.15)    |

(continued)

| Group                     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Black or African American | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 38  | 0.05<br>(0.05, 0.05)    |
| Black or African American | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 38  | 0.80<br>(0.80, 0.80)    |
| Black or African American | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 38  | 0.15<br>(0.15, 0.15)    |
| Black or African American | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 94  | 0.05<br>(0.05, 0.05)    |
| Black or African American | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 94  | 0.81<br>(0.79, 0.82)    |
| Black or African American | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 94  | 0.15<br>(0.15, 0.15)    |
| Black or African American | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 332 | 1.33<br>(1.10, 1.62)    |
| Black or African American | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 332 | 16.19<br>(13.79, 18.99) |
| Black or African American | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 332 | 9.18<br>(7.98, 10.57)   |
| Black or African American | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 111 | 1.82<br>(1.24, 2.66)    |
| Black or African American | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 111 | 20.44<br>(14.38, 29.07) |
| Black or African American | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 111 | 12.52<br>(9.57, 16.39)  |
| Black or African American | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 38  | 0.05<br>(0.05, 0.05)    |
| Black or African American | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 38  | 0.80<br>(0.80, 0.80)    |
| Black or African American | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 38  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group                     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                |
|---------------------------|--------|---------|---------------------|-------------------------|----|------------------------|
| Black or African American | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 94 | 0.93<br>(0.57, 1.49)   |
| Black or African American | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 94 | 10.46<br>(6.88, 15.91) |
| Black or African American | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 94 | 4.71<br>(3.31, 6.71)   |
| Asian                     | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 18 | 0.05<br>(0.05, 0.05)   |
| Asian                     | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 18 | 0.80<br>(0.80, 0.80)   |
| Asian                     | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 18 | 0.15<br>(0.15, 0.15)   |
| Asian                     | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 5  | 0.07<br>(0.04, 0.12)   |
| Asian                     | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 5  | 0.80<br>(0.80, 0.80)   |
| Asian                     | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 5  | 0.15<br>(0.15, 0.15)   |
| Asian                     | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0.05<br>(0.05, 0.05)   |
| Asian                     | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0.80<br>(0.80, 0.80)   |
| Asian                     | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0.15<br>(0.15, 0.15)   |
| Asian                     | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 10 | 0.05<br>(0.05, 0.05)   |
| Asian                     | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 10 | 0.80<br>(0.80, 0.80)   |
| Asian                     | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 10 | 0.15<br>(0.15, 0.15)   |

(continued)

| Group                            | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                  |
|----------------------------------|--------|---------|---------------------|-------------------------|-----|--------------------------|
| Asian                            | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 18  | 2.15<br>(1.01, 4.58)     |
| Asian                            | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 18  | 20.66<br>(10.86, 39.30)  |
| Asian                            | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 18  | 10.30<br>(6.01, 17.63)   |
| Asian                            | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 5   | 3.89<br>(2.24, 6.74)     |
| Asian                            | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 5   | 52.83<br>(12.92, 215.97) |
| Asian                            | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 5   | 24.28<br>(8.61, 68.46)   |
| Asian                            | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2   | 0.05<br>(0.05, 0.05)     |
| Asian                            | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2   | 0.80<br>(0.80, 0.80)     |
| Asian                            | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2   | 0.15<br>(0.15, 0.15)     |
| Asian                            | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 10  | 0.51<br>(0.16, 1.61)     |
| Asian                            | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 10  | 6.07<br>(2.15, 17.12)    |
| Asian                            | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 10  | 5.58<br>(2.70, 11.54)    |
| American Indian or Alaska Native | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 149 | 0.05<br>(0.05, 0.05)     |
| American Indian or Alaska Native | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 149 | 0.80<br>(0.80, 0.80)     |
| American Indian or Alaska Native | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 149 | 0.15<br>(0.15, 0.15)     |

(continued)

| Group                            | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|----------------------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| American Indian or Alaska Native | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 49  | 0.05<br>(0.05, 0.05)    |
| American Indian or Alaska Native | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 49  | 0.80<br>(0.80, 0.80)    |
| American Indian or Alaska Native | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 49  | 0.15<br>(0.15, 0.15)    |
| American Indian or Alaska Native | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 18  | 0.05<br>(0.05, 0.05)    |
| American Indian or Alaska Native | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 18  | 0.80<br>(0.80, 0.80)    |
| American Indian or Alaska Native | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 18  | 0.15<br>(0.15, 0.15)    |
| American Indian or Alaska Native | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 48  | 0.05<br>(0.05, 0.05)    |
| American Indian or Alaska Native | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 48  | 0.80<br>(0.80, 0.80)    |
| American Indian or Alaska Native | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 48  | 0.15<br>(0.15, 0.15)    |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 149 | 1.34<br>(1.01, 1.79)    |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 149 | 16.66<br>(12.81, 21.68) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 149 | 8.81<br>(6.94, 11.18)   |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 49  | 2.79<br>(1.56, 4.98)    |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 49  | 34.07<br>(22.72, 51.09) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 49  | 14.32<br>(10.15, 20.21) |

(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)     | 18 | 0.05<br>(0.05, 0.05)   |
| American Indian or Alaska Native          | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 18 | 0.80<br>(0.80, 0.80)   |
| American Indian or Alaska Native          | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 18 | 0.15<br>(0.15, 0.15)   |
| American Indian or Alaska Native          | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 48 | 0.70<br>(0.43, 1.15)   |
| American Indian or Alaska Native          | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 48 | 9.20<br>(6.04, 14.01)  |
| American Indian or Alaska Native          | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 48 | 4.46<br>(2.94, 6.77)   |
| Native Hawaiian or Other Pacific Islander | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 2  | 0.05<br>(0.05, 0.05)   |
| Native Hawaiian or Other Pacific Islander | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0.80<br>(0.80, 0.80)   |
| Native Hawaiian or Other Pacific Islander | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0.15<br>(0.15, 0.15)   |
| Native Hawaiian or Other Pacific Islander | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05)   |
| Native Hawaiian or Other Pacific Islander | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80)   |
| Native Hawaiian or Other Pacific Islander | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15)   |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 2  | 2.86<br>(1.01, 8.14)   |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 24.67<br>(9.77, 62.29) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 2  | 10.65<br>(8.80, 12.90) |

(continued)

| Group                                     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                 |
|---|--------|---------|---------------------|-------------------------|----|-------------------------|
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 1  | 3.09<br>(3.09, 3.09)    |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 18.62<br>(18.62, 18.62) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 1  | 12.15<br>(12.15, 12.15) |
| Multiracial                               | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 25 | 0.05<br>(0.05, 0.05)    |
| Multiracial                               | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 25 | 0.80<br>(0.80, 0.80)    |
| Multiracial                               | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 25 | 0.15<br>(0.15, 0.15)    |
| Multiracial                               | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 9  | 0.05<br>(0.05, 0.05)    |
| Multiracial                               | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 9  | 0.80<br>(0.80, 0.80)    |
| Multiracial                               | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 9  | 0.15<br>(0.15, 0.15)    |
| Multiracial                               | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0.05<br>(0.05, 0.05)    |
| Multiracial                               | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0.80<br>(0.80, 0.80)    |
| Multiracial                               | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0.15<br>(0.15, 0.15)    |
| Multiracial                               | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 15 | 0.05<br>(0.05, 0.05)    |
| Multiracial                               | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 15 | 0.80<br>(0.80, 0.80)    |
| Multiracial                               | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 15 | 0.15<br>(0.15, 0.15)    |

(continued)

| Group                    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                 |
|--------------------------|--------|---------|---------------------|-------------------------|----|-------------------------|
| Multiracial              | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 25 | 1.26<br>(0.63, 2.52)    |
| Multiracial              | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 25 | 16.70<br>(10.38, 26.86) |
| Multiracial              | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 25 | 11.25<br>(6.17, 20.52)  |
| Multiracial              | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 9  | 2.79<br>(1.15, 6.76)    |
| Multiracial              | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 9  | 35.72<br>(15.57, 81.92) |
| Multiracial              | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 9  | 9.78<br>(5.54, 17.26)   |
| Multiracial              | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0.05<br>(0.05, 0.05)    |
| Multiracial              | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0.80<br>(0.80, 0.80)    |
| Multiracial              | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0.15<br>(0.15, 0.15)    |
| Multiracial              | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 15 | 1.85<br>(0.49, 6.95)    |
| Multiracial              | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 15 | 16.42<br>(6.17, 43.75)  |
| Multiracial              | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 15 | 7.36<br>(2.96, 18.26)   |
| Not reported and unknown | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 12 | 0.05<br>(0.05, 0.05)    |
| Not reported and unknown | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 12 | 0.80<br>(0.80, 0.80)    |
| Not reported and unknown | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 12 | 0.15<br>(0.15, 0.15)    |

(continued)

| Group                    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                 |
|--------------------------|--------|---------|---------------------|-------------------------|----|-------------------------|
| Not reported and unknown | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05)    |
| Not reported and unknown | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80)    |
| Not reported and unknown | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15)    |
| Not reported and unknown | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0.05<br>(0.05, 0.05)    |
| Not reported and unknown | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0.80<br>(0.80, 0.80)    |
| Not reported and unknown | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0.15<br>(0.15, 0.15)    |
| Not reported and unknown | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 4  | 0.05<br>(0.05, 0.05)    |
| Not reported and unknown | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 4  | 0.80<br>(0.80, 0.80)    |
| Not reported and unknown | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 4  | 0.15<br>(0.15, 0.15)    |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 12 | 2.50<br>(0.90, 6.94)    |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 12 | 21.32<br>(14.43, 31.50) |
| Not reported and unknown | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 12 | 20.41<br>(12.24, 34.04) |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1  | 1.70<br>(1.70, 1.70)    |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 30.53<br>(30.53, 30.53) |
| Not reported and unknown | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 1  | 26.52<br>(26.52, 26.52) |

(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)     | 2 | 0.05<br>(0.05, 0.05)    |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2 | 0.80<br>(0.80, 0.80)    |
| Not reported and unknown | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2 | 0.15<br>(0.15, 0.15)    |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 4 | 2.85<br>(1.31, 6.21)    |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 4 | 8.77<br>(4.28, 17.98)   |
| Not reported and unknown | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 4 | 15.88<br>(13.13, 19.20) |

Table 7i. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Underrepresented Minority Status in the U.S.

| Group   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---|--------|---------|---------------------|-------------------------|-----|-------------------------|
| <b>Underrepresented Minority Status in the U.S.</b> |        |         |                     |                         |     |                         |
| URM   | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 0.05<br>(0.05, 0.05)    |
| URM   | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 0.80<br>(0.80, 0.80)    |
| URM   | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 0.15<br>(0.15, 0.15)    |
| URM   | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 0.05<br>(0.05, 0.05)    |
| URM   | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 0.80<br>(0.80, 0.80)    |
| URM   | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 0.15<br>(0.15, 0.15)    |
| URM   | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0.05<br>(0.05, 0.05)    |
| URM   | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0.80<br>(0.80, 0.80)    |
| URM   | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0.15<br>(0.15, 0.15)    |
| URM   | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 70  | 0.05<br>(0.05, 0.06)    |
| URM   | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 0.80<br>(0.80, 0.80)    |
| URM   | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 70  | 0.15<br>(0.15, 0.15)    |
| URM   | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 1.33<br>(1.07, 1.66)    |
| URM   | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 15.83<br>(13.04, 19.22) |
| URM   | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 9.26<br>(7.76, 11.04)   |

(continued)

| Group   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| URM     | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 1.60<br>(1.06, 2.41)    |
| URM     | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 17.64<br>(12.36, 25.18) |
| URM     | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 12.18<br>(9.07, 16.36)  |
| URM     | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0.05<br>(0.05, 0.05)    |
| URM     | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0.80<br>(0.80, 0.80)    |
| URM     | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0.15<br>(0.15, 0.15)    |
| URM     | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 70  | 0.93<br>(0.65, 1.32)    |
| URM     | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 10.38<br>(7.41, 14.55)  |
| URM     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 70  | 4.59<br>(3.28, 6.41)    |
| Non-URM | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 0.05<br>(0.05, 0.05)    |
| Non-URM | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 0.80<br>(0.80, 0.80)    |
| Non-URM | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 0.15<br>(0.15, 0.15)    |
| Non-URM | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 0.05<br>(0.05, 0.05)    |
| Non-URM | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 0.82<br>(0.78, 0.85)    |
| Non-URM | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Non-URM | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0.05<br>(0.05, 0.05)    |
| Non-URM | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0.80<br>(0.80, 0.80)    |
| Non-URM | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0.15<br>(0.15, 0.15)    |
| Non-URM | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 71  | 0.05<br>(0.05, 0.05)    |
| Non-URM | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 0.80<br>(0.80, 0.80)    |
| Non-URM | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 71  | 0.15<br>(0.15, 0.15)    |
| Non-URM | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 1.36<br>(1.05, 1.77)    |
| Non-URM | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 16.64<br>(13.58, 20.37) |
| Non-URM | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 8.85<br>(7.31, 10.73)   |
| Non-URM | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 3.92<br>(2.47, 6.21)    |
| Non-URM | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 47.58<br>(34.24, 66.13) |
| Non-URM | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 17.81<br>(13.03, 24.36) |
| Non-URM | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0.05<br>(0.05, 0.05)    |
| Non-URM | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0.80<br>(0.80, 0.80)    |
| Non-URM | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                |
|---------|--------|---------|---------------------|-------------------------|----|------------------------|
| Non-URM | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 71 | 1.05<br>(0.65, 1.70)   |
| Non-URM | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 71 | 10.56<br>(7.07, 15.79) |
| Non-URM | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 71 | 5.08<br>(3.67, 7.03)   |

Table 7j. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Underrepresented Minority Status in the U.S.

| Group  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                |
|--|--------|---------|---------------------|-------------------------|-----|------------------------|
| <b>Age, Underrepresented Minority Status in the U.S.</b> |        |         |                     |                         |     |                        |
| Age 18 - 59 URM  | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 113 | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 URM  | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 113 | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 URM  | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 113 | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 URM  | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 36  | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 URM  | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 URM  | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 36  | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 URM  | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 URM  | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 URM  | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 URM  | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.05<br>(0.04, 0.06)   |
| Age 18 - 59 URM  | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 URM  | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 URM  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 113 | 0.95<br>(0.71, 1.28)   |
| Age 18 - 59 URM  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 113 | 10.76<br>(8.28, 13.99) |
| Age 18 - 59 URM  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 113 | 6.41<br>(5.02, 8.18)   |

(continued)

| Group               | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                |
|---------------------|--------|---------|---------------------|-------------------------|-----|------------------------|
| Age 18 - 59 URM     | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 36  | 1.12<br>(0.65, 1.93)   |
| Age 18 - 59 URM     | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 10.28<br>(6.59, 16.03) |
| Age 18 - 59 URM     | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 36  | 7.81<br>(5.31, 11.49)  |
| Age 18 - 59 URM     | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 URM     | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 URM     | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 URM     | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.47<br>(0.29, 0.75)   |
| Age 18 - 59 URM     | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 5.34<br>(3.44, 8.28)   |
| Age 18 - 59 URM     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 2.09<br>(1.35, 3.24)   |
| Age 18 - 59 Non-URM | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 111 | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 Non-URM | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 111 | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 Non-URM | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 111 | 0.15<br>(0.15, 0.15)   |
| Age 18 - 59 Non-URM | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.05<br>(0.05, 0.05)   |
| Age 18 - 59 Non-URM | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 0.80<br>(0.80, 0.80)   |
| Age 18 - 59 Non-URM | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 35  | 0.15<br>(0.15, 0.15)   |

(continued)

| Group               | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Age 18 - 59 Non-URM | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Non-URM | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Non-URM | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0.15<br>(0.15, 0.15)    |
| Age 18 - 59 Non-URM | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Non-URM | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Non-URM | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 0.15<br>(0.15, 0.15)    |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 111 | 0.93<br>(0.65, 1.31)    |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 111 | 10.19<br>(7.79, 13.33)  |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 111 | 5.89<br>(4.51, 7.70)    |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 35  | 3.04<br>(1.60, 5.79)    |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 33.89<br>(21.53, 53.37) |
| Age 18 - 59 Non-URM | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 35  | 12.01<br>(7.99, 18.06)  |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0.05<br>(0.05, 0.05)    |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0.80<br>(0.80, 0.80)    |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group               | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC               |
|---------------------|--------|---------|---------------------|-------------------------|-----|-----------------------|
| Age 18 - 59 Non-URM | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.70<br>(0.36, 1.36)  |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 6.36<br>(3.69, 10.95) |
| Age 18 - 59 Non-URM | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 3.16<br>(2.04, 4.87)  |
| Age $\geq$ 60 URM   | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 114 | 0.05<br>(0.05, 0.05)  |
| Age $\geq$ 60 URM   | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 114 | 0.80<br>(0.80, 0.80)  |
| Age $\geq$ 60 URM   | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 114 | 0.15<br>(0.15, 0.15)  |
| Age $\geq$ 60 URM   | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.05<br>(0.05, 0.05)  |
| Age $\geq$ 60 URM   | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 0.80<br>(0.80, 0.80)  |
| Age $\geq$ 60 URM   | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 35  | 0.15<br>(0.15, 0.15)  |
| Age $\geq$ 60 URM   | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0.05<br>(0.05, 0.05)  |
| Age $\geq$ 60 URM   | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0.80<br>(0.80, 0.80)  |
| Age $\geq$ 60 URM   | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0.15<br>(0.15, 0.15)  |
| Age $\geq$ 60 URM   | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.05<br>(0.04, 0.05)  |
| Age $\geq$ 60 URM   | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 0.80<br>(0.80, 0.80)  |
| Age $\geq$ 60 URM   | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 0.15<br>(0.15, 0.15)  |

(continued)

| Group                 | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                  |
|-----------------------|--------|---------|---------------------|-------------------------|-----|--------------------------|
| Age $\geq$ 60 URM     | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 114 | 2.50<br>(1.82, 3.42)     |
| Age $\geq$ 60 URM     | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 114 | 32.68<br>(25.29, 42.23)  |
| Age $\geq$ 60 URM     | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 114 | 18.45<br>(14.88, 22.87)  |
| Age $\geq$ 60 URM     | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 35  | 3.64<br>(2.20, 6.03)     |
| Age $\geq$ 60 URM     | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 62.80<br>(37.48, 105.23) |
| Age $\geq$ 60 URM     | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 35  | 34.65<br>(24.94, 48.14)  |
| Age $\geq$ 60 URM     | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0.05<br>(0.05, 0.05)     |
| Age $\geq$ 60 URM     | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0.80<br>(0.80, 0.80)     |
| Age $\geq$ 60 URM     | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0.15<br>(0.15, 0.15)     |
| Age $\geq$ 60 URM     | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 3.39<br>(2.20, 5.22)     |
| Age $\geq$ 60 URM     | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 36.78<br>(23.53, 57.49)  |
| Age $\geq$ 60 URM     | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 20.48<br>(13.85, 30.30)  |
| Age $\geq$ 60 Non-URM | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 116 | 0.05<br>(0.05, 0.05)     |
| Age $\geq$ 60 Non-URM | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 116 | 0.80<br>(0.80, 0.80)     |
| Age $\geq$ 60 Non-URM | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 116 | 0.15<br>(0.15, 0.15)     |

(continued)

| Group                 | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                  |
|-----------------------|--------|---------|---------------------|-------------------------|-----|--------------------------|
| Age $\geq$ 60 Non-URM | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 36  | 0.05<br>(0.05, 0.05)     |
| Age $\geq$ 60 Non-URM | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 0.85<br>(0.75, 0.95)     |
| Age $\geq$ 60 Non-URM | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 36  | 0.15<br>(0.15, 0.15)     |
| Age $\geq$ 60 Non-URM | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0.05<br>(0.05, 0.05)     |
| Age $\geq$ 60 Non-URM | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0.80<br>(0.80, 0.80)     |
| Age $\geq$ 60 Non-URM | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0.15<br>(0.15, 0.15)     |
| Age $\geq$ 60 Non-URM | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 36  | 0.05<br>(0.05, 0.06)     |
| Age $\geq$ 60 Non-URM | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 0.80<br>(0.80, 0.80)     |
| Age $\geq$ 60 Non-URM | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 36  | 0.15<br>(0.15, 0.15)     |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 116 | 2.88<br>(2.00, 4.14)     |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 116 | 42.70<br>(32.17, 56.68)  |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 116 | 19.37<br>(15.50, 24.20)  |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 36  | 5.88<br>(3.21, 10.74)    |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 82.09<br>(52.81, 127.62) |
| Age $\geq$ 60 Non-URM | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 36  | 33.58<br>(20.94, 53.86)  |

(continued)

| Group                 | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                 |
|-----------------------|--------|---------|---------------------|-------------------------|----|-------------------------|
| Age $\geq$ 60 Non-URM | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14 | 0.05<br>(0.05, 0.05)    |
| Age $\geq$ 60 Non-URM | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14 | 0.80<br>(0.80, 0.80)    |
| Age $\geq$ 60 Non-URM | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14 | 0.15<br>(0.15, 0.15)    |
| Age $\geq$ 60 Non-URM | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 36 | 2.30<br>(1.30, 4.08)    |
| Age $\geq$ 60 Non-URM | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 36 | 28.08<br>(17.06, 46.21) |
| Age $\geq$ 60 Non-URM | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 36 | 12.71<br>(8.41, 19.22)  |



Table 7k. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Country

| Group          | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|----------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| <b>Country</b> |        |         |                     |                         |     |                         |
| United States  | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 454 | 0.05<br>(0.05, 0.05)    |
| United States  | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 454 | 0.80<br>(0.80, 0.80)    |
| United States  | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 454 | 0.15<br>(0.15, 0.15)    |
| United States  | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 142 | 0.05<br>(0.05, 0.05)    |
| United States  | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 142 | 0.81<br>(0.79, 0.83)    |
| United States  | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 142 | 0.15<br>(0.15, 0.15)    |
| United States  | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0.05<br>(0.05, 0.05)    |
| United States  | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0.80<br>(0.80, 0.80)    |
| United States  | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0.15<br>(0.15, 0.15)    |
| United States  | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 0.05<br>(0.05, 0.05)    |
| United States  | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 0.80<br>(0.80, 0.80)    |
| United States  | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 0.15<br>(0.15, 0.15)    |
| United States  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 454 | 1.35<br>(1.13, 1.61)    |
| United States  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 454 | 16.26<br>(14.12, 18.73) |
| United States  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 454 | 9.04<br>(7.92, 10.31)   |

(continued)

| Group         | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|---------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| United States | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 142 | 2.57<br>(1.88, 3.51)    |
| United States | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 142 | 29.87<br>(23.41, 38.11) |
| United States | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 142 | 14.91<br>(12.00, 18.51) |
| United States | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0.05<br>(0.05, 0.05)    |
| United States | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0.80<br>(0.80, 0.80)    |
| United States | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0.15<br>(0.15, 0.15)    |
| United States | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 0.99<br>(0.73, 1.34)    |
| United States | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 10.47<br>(8.05, 13.63)  |
| United States | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 4.83<br>(3.83, 6.10)    |
| Argentina     | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 45  | 0.05<br>(0.05, 0.05)    |
| Argentina     | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 45  | 0.80<br>(0.80, 0.80)    |
| Argentina     | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 45  | 0.15<br>(0.15, 0.15)    |
| Argentina     | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 11  | 0.05<br>(0.05, 0.05)    |
| Argentina     | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 11  | 0.80<br>(0.80, 0.80)    |
| Argentina     | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 11  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                  |
|-----------|--------|---------|---------------------|-------------------------|----|--------------------------|
| Argentina | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 5  | 0.05<br>(0.05, 0.05)     |
| Argentina | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 5  | 0.80<br>(0.80, 0.80)     |
| Argentina | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 5  | 0.15<br>(0.15, 0.15)     |
| Argentina | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 16 | 0.05<br>(0.05, 0.05)     |
| Argentina | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 16 | 0.80<br>(0.80, 0.80)     |
| Argentina | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 16 | 0.15<br>(0.15, 0.15)     |
| Argentina | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 45 | 1.47<br>(0.91, 2.36)     |
| Argentina | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 45 | 19.39<br>(12.92, 29.08)  |
| Argentina | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 45 | 10.05<br>(6.85, 14.75)   |
| Argentina | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 11 | 3.37<br>(0.76, 15.00)    |
| Argentina | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 11 | 48.05<br>(19.88, 116.17) |
| Argentina | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 11 | 22.23<br>(10.96, 45.09)  |
| Argentina | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 5  | 0.05<br>(0.05, 0.05)     |
| Argentina | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 5  | 0.80<br>(0.80, 0.80)     |
| Argentina | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 5  | 0.15<br>(0.15, 0.15)     |

(continued)

| Group     | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC               |
|-----------|--------|---------|---------------------|-------------------------|----|-----------------------|
| Argentina | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 16 | 0.79<br>(0.33, 1.89)  |
| Argentina | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 16 | 7.57<br>(3.41, 16.81) |
| Argentina | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 16 | 4.51<br>(2.20, 9.24)  |
| Brazil    | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 78 | 0.05<br>(0.05, 0.05)  |
| Brazil    | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 78 | 0.80<br>(0.80, 0.80)  |
| Brazil    | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 78 | 0.15<br>(0.15, 0.15)  |
| Brazil    | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 29 | 0.05<br>(0.05, 0.06)  |
| Brazil    | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 29 | 0.80<br>(0.80, 0.80)  |
| Brazil    | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 29 | 0.15<br>(0.15, 0.15)  |
| Brazil    | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 15 | 0.05<br>(0.05, 0.05)  |
| Brazil    | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 15 | 0.80<br>(0.80, 0.80)  |
| Brazil    | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 15 | 0.15<br>(0.15, 0.15)  |
| Brazil    | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 30 | 0.05<br>(0.05, 0.05)  |
| Brazil    | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 30 | 0.80<br>(0.80, 0.80)  |
| Brazil    | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 30 | 0.15<br>(0.15, 0.15)  |

(continued)

| Group  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                 |
|--------|--------|---------|---------------------|-------------------------|----|-------------------------|
| Brazil | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 78 | 1.89<br>(1.25, 2.85)    |
| Brazil | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 78 | 24.23<br>(17.26, 34.03) |
| Brazil | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 78 | 9.82<br>(6.87, 14.04)   |
| Brazil | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 29 | 2.05<br>(1.26, 3.33)    |
| Brazil | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 29 | 25.63<br>(15.10, 43.50) |
| Brazil | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 29 | 15.35<br>(9.85, 23.90)  |
| Brazil | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 15 | 0.05<br>(0.05, 0.05)    |
| Brazil | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 15 | 0.80<br>(0.80, 0.80)    |
| Brazil | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 15 | 0.15<br>(0.15, 0.15)    |
| Brazil | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 30 | 0.61<br>(0.30, 1.23)    |
| Brazil | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 30 | 7.43<br>(4.21, 13.11)   |
| Brazil | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 30 | 4.73<br>(2.69, 8.31)    |
| Chile  | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 13 | 0.05<br>(0.05, 0.05)    |
| Chile  | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 13 | 0.80<br>(0.80, 0.80)    |
| Chile  | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 13 | 0.15<br>(0.15, 0.15)    |

(continued)

| Group | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                 |
|-------|--------|---------|---------------------|-------------------------|----|-------------------------|
| Chile | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05)    |
| Chile | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80)    |
| Chile | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15)    |
| Chile | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05)    |
| Chile | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80)    |
| Chile | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15)    |
| Chile | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05)    |
| Chile | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80)    |
| Chile | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15)    |
| Chile | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 13 | 4.14<br>(1.65, 10.37)   |
| Chile | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 13 | 22.09<br>(12.75, 38.27) |
| Chile | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 13 | 13.15<br>(6.95, 24.87)  |
| Chile | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05)    |
| Chile | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80)    |
| Chile | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0.37<br>(0.37, 0.37)    |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC              |
|----------|--------|---------|---------------------|-------------------------|----|----------------------|
| Chile    | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05) |
| Chile    | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80) |
| Chile    | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15) |
| Chile    | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 1  | 0.46<br>(0.46, 0.46) |
| Chile    | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 2.93<br>(2.93, 2.93) |
| Chile    | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 1  | 1.13<br>(1.13, 1.13) |
| Columbia | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 64 | 0.05<br>(0.05, 0.05) |
| Columbia | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 64 | 0.80<br>(0.80, 0.80) |
| Columbia | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 64 | 0.15<br>(0.15, 0.15) |
| Columbia | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 20 | 0.05<br>(0.04, 0.05) |
| Columbia | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 20 | 0.80<br>(0.80, 0.80) |
| Columbia | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 20 | 0.15<br>(0.15, 0.15) |
| Columbia | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 3  | 0.05<br>(0.05, 0.05) |
| Columbia | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 3  | 0.80<br>(0.80, 0.80) |
| Columbia | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 3  | 0.15<br>(0.15, 0.15) |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                 |
|----------|--------|---------|---------------------|-------------------------|----|-------------------------|
| Columbia | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 13 | 0.05<br>(0.05, 0.05)    |
| Columbia | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 13 | 0.80<br>(0.80, 0.80)    |
| Columbia | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 13 | 0.15<br>(0.15, 0.15)    |
| Columbia | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 64 | 1.12<br>(0.75, 1.67)    |
| Columbia | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 64 | 12.70<br>(8.40, 19.20)  |
| Columbia | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 64 | 8.16<br>(5.82, 11.45)   |
| Columbia | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 20 | 2.61<br>(1.03, 6.62)    |
| Columbia | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 20 | 31.48<br>(17.36, 57.08) |
| Columbia | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 20 | 12.55<br>(8.24, 19.12)  |
| Columbia | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 3  | 0.05<br>(0.05, 0.05)    |
| Columbia | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 3  | 0.80<br>(0.80, 0.80)    |
| Columbia | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 3  | 0.15<br>(0.15, 0.15)    |
| Columbia | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 13 | 0.61<br>(0.22, 1.71)    |
| Columbia | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 13 | 9.19<br>(3.60, 23.44)   |
| Columbia | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 13 | 4.78<br>(2.12, 10.76)   |

(continued)

| Group  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N | GMT/GMC                |
|--------|--------|---------|---------------------|-------------------------|---|------------------------|
| Mexico | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 9 | 0.05<br>(0.05, 0.05)   |
| Mexico | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 9 | 0.80<br>(0.80, 0.80)   |
| Mexico | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 9 | 0.15<br>(0.15, 0.15)   |
| Mexico | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 4 | 0.06<br>(0.04, 0.08)   |
| Mexico | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 4 | 0.80<br>(0.80, 0.80)   |
| Mexico | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 4 | 0.15<br>(0.15, 0.15)   |
| Mexico | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1 | 0.05<br>(0.05, 0.05)   |
| Mexico | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1 | 0.80<br>(0.80, 0.80)   |
| Mexico | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1 | 0.15<br>(0.15, 0.15)   |
| Mexico | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 5 | 0.05<br>(0.05, 0.05)   |
| Mexico | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 5 | 0.80<br>(0.80, 0.80)   |
| Mexico | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5 | 0.15<br>(0.15, 0.15)   |
| Mexico | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 9 | 0.74<br>(0.29, 1.90)   |
| Mexico | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 9 | 16.10<br>(5.55, 46.75) |
| Mexico | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 9 | 11.26<br>(4.24, 29.93) |

(continued)

| Group  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                 |
|--------|--------|---------|---------------------|-------------------------|----|-------------------------|
| Mexico | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 4  | 1.96<br>(0.42, 9.23)    |
| Mexico | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 4  | 32.46<br>(7.08, 148.71) |
| Mexico | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 4  | 13.89<br>(3.79, 50.94)  |
| Mexico | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05)    |
| Mexico | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80)    |
| Mexico | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15)    |
| Mexico | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 5  | 0.66<br>(0.25, 1.69)    |
| Mexico | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 5  | 12.36<br>(7.69, 19.86)  |
| Mexico | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5  | 6.18<br>(3.37, 11.36)   |
| Peru   | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 19 | 0.05<br>(0.05, 0.05)    |
| Peru   | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 19 | 0.80<br>(0.80, 0.80)    |
| Peru   | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 19 | 0.15<br>(0.15, 0.15)    |
| Peru   | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 6  | 0.05<br>(0.05, 0.05)    |
| Peru   | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 6  | 0.80<br>(0.80, 0.80)    |
| Peru   | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 6  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                  |
|-------|--------|---------|---------------------|-------------------------|----|--------------------------|
| Peru  | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05)     |
| Peru  | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80)     |
| Peru  | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15)     |
| Peru  | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 5  | 0.05<br>(0.05, 0.05)     |
| Peru  | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 5  | 0.80<br>(0.80, 0.80)     |
| Peru  | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5  | 0.15<br>(0.15, 0.15)     |
| Peru  | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 19 | 2.12<br>(1.05, 4.28)     |
| Peru  | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 19 | 22.76<br>(9.92, 52.21)   |
| Peru  | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 19 | 13.64<br>(8.00, 23.25)   |
| Peru  | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 6  | 5.16<br>(2.20, 12.11)    |
| Peru  | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 6  | 69.02<br>(32.43, 146.86) |
| Peru  | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 6  | 22.38<br>(12.79, 39.16)  |
| Peru  | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05)     |
| Peru  | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80)     |
| Peru  | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15)     |

(continued)

| Group        | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC               |
|--------------|--------|---------|---------------------|-------------------------|-----|-----------------------|
| Peru         | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 5   | 1.54<br>(0.31, 7.56)  |
| Peru         | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 5   | 7.47<br>(0.98, 56.72) |
| Peru         | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5   | 6.77<br>(1.68, 27.23) |
| South Africa | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 231 | 0.05<br>(0.05, 0.05)  |
| South Africa | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 231 | 0.80<br>(0.80, 0.80)  |
| South Africa | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 231 | 0.15<br>(0.15, 0.16)  |
| South Africa | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 70  | 0.05<br>(0.05, 0.06)  |
| South Africa | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 0.80<br>(0.80, 0.80)  |
| South Africa | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 70  | 0.15<br>(0.15, 0.15)  |
| South Africa | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 27  | 0.05<br>(0.05, 0.05)  |
| South Africa | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 27  | 0.80<br>(0.80, 0.80)  |
| South Africa | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 27  | 0.15<br>(0.15, 0.15)  |
| South Africa | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69  | 0.05<br>(0.05, 0.05)  |
| South Africa | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 0.81<br>(0.78, 0.84)  |
| South Africa | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69  | 0.15<br>(0.15, 0.16)  |

(continued)

| Group        | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|--------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| South Africa | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 231 | 1.19<br>(0.95, 1.51)    |
| South Africa | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 231 | 15.16<br>(12.68, 18.13) |
| South Africa | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 231 | 8.54<br>(7.24, 10.08)   |
| South Africa | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 70  | 2.59<br>(1.62, 4.13)    |
| South Africa | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 26.69<br>(18.00, 39.59) |
| South Africa | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 70  | 14.64<br>(10.61, 20.20) |
| South Africa | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 27  | 0.05<br>(0.05, 0.05)    |
| South Africa | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 27  | 0.80<br>(0.80, 0.80)    |
| South Africa | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 27  | 0.15<br>(0.15, 0.15)    |
| South Africa | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69  | 1.31<br>(0.84, 2.04)    |
| South Africa | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 12.55<br>(8.32, 18.93)  |
| South Africa | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69  | 6.61<br>(4.63, 9.43)    |

Table 7l. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by HIV Infection

| Group                | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|----------------------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| <b>HIV Infection</b> |        |         |                     |                         |     |                         |
| Negative             | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 848 | 0.05<br>(0.05, 0.05)    |
| Negative             | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 848 | 0.80<br>(0.80, 0.80)    |
| Negative             | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 848 | 0.15<br>(0.15, 0.15)    |
| Negative             | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 265 | 0.05<br>(0.05, 0.05)    |
| Negative             | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 265 | 0.80<br>(0.79, 0.81)    |
| Negative             | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 265 | 0.15<br>(0.15, 0.15)    |
| Negative             | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 100 | 0.05<br>(0.05, 0.05)    |
| Negative             | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 100 | 0.80<br>(0.80, 0.80)    |
| Negative             | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 100 | 0.15<br>(0.15, 0.15)    |
| Negative             | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 266 | 0.05<br>(0.05, 0.05)    |
| Negative             | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 266 | 0.80<br>(0.79, 0.80)    |
| Negative             | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 266 | 0.15<br>(0.15, 0.15)    |
| Negative             | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 848 | 1.43<br>(1.26, 1.63)    |
| Negative             | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 848 | 17.56<br>(15.77, 19.55) |
| Negative             | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 848 | 9.55<br>(8.65, 10.54)   |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | GMT/GMC                 |
|----------|--------|---------|---------------------|-------------------------|-----|-------------------------|
| Negative | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 265 | 2.42<br>(1.90, 3.08)    |
| Negative | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 265 | 29.55<br>(24.46, 35.70) |
| Negative | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 265 | 14.91<br>(12.69, 17.52) |
| Negative | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 100 | 0.05<br>(0.05, 0.05)    |
| Negative | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 100 | 0.80<br>(0.80, 0.80)    |
| Negative | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 100 | 0.15<br>(0.15, 0.15)    |
| Negative | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 266 | 0.87<br>(0.70, 1.10)    |
| Negative | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 266 | 9.49<br>(7.77, 11.60)   |
| Negative | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 266 | 5.12<br>(4.28, 6.12)    |
| Positive | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 65  | 0.05<br>(0.05, 0.05)    |
| Positive | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 65  | 0.80<br>(0.80, 0.80)    |
| Positive | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 65  | 0.15<br>(0.15, 0.15)    |
| Positive | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 18  | 0.06<br>(0.05, 0.07)    |
| Positive | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 18  | 0.80<br>(0.80, 0.80)    |
| Positive | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 18  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                 |
|----------|--------|---------|---------------------|-------------------------|----|-------------------------|
| Positive | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 9  | 0.05<br>(0.05, 0.05)    |
| Positive | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 9  | 0.80<br>(0.80, 0.80)    |
| Positive | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 9  | 0.15<br>(0.15, 0.15)    |
| Positive | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 14 | 0.05<br>(0.05, 0.05)    |
| Positive | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 14 | 0.80<br>(0.80, 0.80)    |
| Positive | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 14 | 0.15<br>(0.15, 0.15)    |
| Positive | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 65 | 1.05<br>(0.66, 1.68)    |
| Positive | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 65 | 11.52<br>(7.30, 18.16)  |
| Positive | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 65 | 6.21<br>(4.22, 9.14)    |
| Positive | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 18 | 4.99<br>(2.24, 11.13)   |
| Positive | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 18 | 39.49<br>(22.01, 70.85) |
| Positive | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 18 | 15.07<br>(9.94, 22.85)  |
| Positive | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 9  | 0.05<br>(0.05, 0.05)    |
| Positive | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 9  | 0.80<br>(0.80, 0.80)    |
| Positive | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 9  | 0.15<br>(0.15, 0.15)    |

(continued)

| Group    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | GMT/GMC                |
|----------|--------|---------|---------------------|-------------------------|----|------------------------|
| Positive | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 14 | 0.83<br>(0.17, 4.12)   |
| Positive | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 14 | 10.02<br>(3.90, 25.74) |
| Positive | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 14 | 3.18<br>(1.04, 9.69)   |

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

Table 8a. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by All participants

| Group                   | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|-------------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| <b>All participants</b> |                       |         |                     |                         |     |                      |                         |                         |
|                         | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 913 | 0.05<br>(0.05, 0.05) | 1.41<br>(1.24, 1.59)    | 1.59<br>(1.50, 1.68)    |
|                         | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 913 | 0.80<br>(0.80, 0.80) | 17.09<br>(15.39, 18.96) | 7.12<br>(6.47, 7.83)    |
|                         | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 913 | 0.15<br>(0.15, 0.15) | 9.28<br>(8.44, 10.21)   | 10.07<br>(9.17, 11.06)  |
|                         | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 283 | 0.05<br>(0.05, 0.05) | 2.52<br>(2.00, 3.19)    | 2.02<br>(1.76, 2.32)    |
|                         | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 283 | 0.80<br>(0.79, 0.81) | 30.05<br>(25.07, 36.02) | 12.22<br>(10.28, 14.53) |
|                         | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 283 | 0.15<br>(0.15, 0.15) | 14.92<br>(12.80, 17.39) | 16.29<br>(14.02, 18.93) |
|                         | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 109 | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
|                         | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 109 | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
|                         | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 109 | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
|                         | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 280 | 0.05<br>(0.05, 0.05) | 0.87<br>(0.70, 1.09)    | 1.38<br>(1.28, 1.50)    |
|                         | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 280 | 0.80<br>(0.79, 0.80) | 9.52<br>(7.86, 11.52)   | 4.42<br>(3.77, 5.18)    |
|                         | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 280 | 0.15<br>(0.15, 0.15) | 5.00<br>(4.20, 5.95)    | 5.59<br>(4.75, 6.57)    |

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               |
|-------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| <b>Age</b>  |                       |         |                     |                         |     |                      |                         |                         |
| Age 18 - 59 | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 453 | 0.05<br>(0.05, 0.05) | 0.94<br>(0.80, 1.11)    | 1.32<br>(1.24, 1.40)    |
| Age 18 - 59 | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 453 | 0.80<br>(0.80, 0.80) | 10.80<br>(9.40, 12.41)  | 4.62<br>(4.08, 5.23)    |
| Age 18 - 59 | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 453 | 0.15<br>(0.15, 0.15) | 6.06<br>(5.32, 6.91)    | 6.59<br>(5.80, 7.50)    |
| Age 18 - 59 | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 141 | 0.05<br>(0.05, 0.05) | 1.76<br>(1.29, 2.41)    | 1.66<br>(1.40, 1.96)    |
| Age 18 - 59 | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 0.80<br>(0.80, 0.80) | 20.39<br>(16.05, 25.89) | 8.35<br>(6.66, 10.47)   |
| Age 18 - 59 | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 141 | 0.15<br>(0.15, 0.15) | 10.36<br>(8.49, 12.65)  | 11.28<br>(9.27, 13.73)  |
| Age 18 - 59 | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 54  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 54  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 54  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 139 | 0.05<br>(0.05, 0.05) | 0.52<br>(0.39, 0.69)    | 1.15<br>(1.07, 1.24)    |
| Age 18 - 59 | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 139 | 0.80<br>(0.79, 0.81) | 5.48<br>(4.31, 6.98)    | 2.73<br>(2.27, 3.29)    |
| Age 18 - 59 | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 139 | 0.15<br>(0.15, 0.15) | 2.84<br>(2.26, 3.57)    | 3.28<br>(2.67, 4.02)    |
| Age ≥ 60    | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 460 | 0.05<br>(0.05, 0.05) | 2.98<br>(2.49, 3.57)    | 2.25<br>(2.00, 2.53)    |
| Age ≥ 60    | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 460 | 0.80<br>(0.80, 0.80) | 40.62<br>(35.11, 47.01) | 16.10<br>(13.92, 18.63) |
| Age ≥ 60    | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 460 | 0.15<br>(0.15, 0.15) | 20.78<br>(18.47, 23.38) | 22.42<br>(19.91, 25.25) |

(continued)

| Group         | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|---------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| Age $\geq$ 60 | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 142 | 0.05<br>(0.05, 0.05) | 5.00<br>(3.66, 6.83)    | 2.96<br>(2.33, 3.75)    |
| Age $\geq$ 60 | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 142 | 0.81<br>(0.78, 0.84) | 63.07<br>(48.83, 81.48) | 25.30<br>(19.75, 32.41) |
| Age $\geq$ 60 | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 142 | 0.15<br>(0.15, 0.15) | 29.97<br>(23.96, 37.48) | 32.89<br>(26.55, 40.75) |
| Age $\geq$ 60 | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 55  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Age $\geq$ 60 | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 55  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Age $\geq$ 60 | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 55  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Age $\geq$ 60 | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 0.05<br>(0.05, 0.05) | 2.46<br>(1.77, 3.42)    | 1.99<br>(1.65, 2.40)    |
| Age $\geq$ 60 | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 0.80<br>(0.80, 0.80) | 28.45<br>(21.21, 38.17) | 11.51<br>(8.70, 15.23)  |
| Age $\geq$ 60 | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 0.15<br>(0.15, 0.15) | 15.36<br>(12.18, 19.37) | 16.09<br>(12.54, 20.64) |

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               |
|---------------------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| <b>Risk for Severe Covid-19</b> |                       |         |                     |                         |     |                      |                         |                         |
| At-risk                         | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 454 | 0.05<br>(0.05, 0.05) | 1.34<br>(1.12, 1.59)    | 1.59<br>(1.45, 1.74)    |
| At-risk                         | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 454 | 0.80<br>(0.80, 0.80) | 17.44<br>(15.14, 20.09) | 7.27<br>(6.38, 8.29)    |
| At-risk                         | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 454 | 0.15<br>(0.15, 0.15) | 9.51<br>(8.27, 10.93)   | 10.41<br>(9.09, 11.91)  |
| At-risk                         | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 140 | 0.05<br>(0.05, 0.05) | 2.53<br>(1.88, 3.39)    | 1.93<br>(1.61, 2.32)    |
| At-risk                         | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 140 | 0.80<br>(0.80, 0.80) | 34.36<br>(27.39, 43.11) | 13.48<br>(10.70, 16.98) |
| At-risk                         | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 140 | 0.15<br>(0.15, 0.15) | 15.52<br>(12.72, 18.95) | 16.77<br>(13.71, 20.51) |
| At-risk                         | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 53  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| At-risk                         | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 53  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| At-risk                         | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 53  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| At-risk                         | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 0.05<br>(0.05, 0.05) | 1.16<br>(0.86, 1.56)    | 1.48<br>(1.32, 1.66)    |
| At-risk                         | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 0.80<br>(0.80, 0.80) | 12.07<br>(9.52, 15.31)  | 5.10<br>(4.06, 6.40)    |
| At-risk                         | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 0.15<br>(0.15, 0.15) | 6.30<br>(5.07, 7.82)    | 6.98<br>(5.64, 8.64)    |
| Not at-risk                     | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 459 | 0.05<br>(0.05, 0.05) | 1.45<br>(1.23, 1.72)    | 1.58<br>(1.47, 1.71)    |
| Not at-risk                     | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 459 | 0.80<br>(0.80, 0.80) | 16.85<br>(14.56, 19.50) | 7.01<br>(6.13, 8.02)    |
| Not at-risk                     | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 459 | 0.15<br>(0.15, 0.15) | 9.14<br>(8.03, 10.39)   | 9.85<br>(8.67, 11.20)   |

(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)     | 143 | 0.05<br>(0.05, 0.05) | 2.52<br>(1.80, 3.53)    | 2.09<br>(1.71, 2.54)    |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 143 | 0.80<br>(0.79, 0.82) | 27.41<br>(21.07, 35.65) | 11.43<br>(8.95, 14.59)  |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 143 | 0.15<br>(0.15, 0.15) | 14.52<br>(11.67, 18.08) | 15.97<br>(12.92, 19.75) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Not at-risk | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Not at-risk | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 139 | 0.05<br>(0.05, 0.05) | 0.72<br>(0.52, 0.98)    | 1.32<br>(1.18, 1.47)    |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 139 | 0.80<br>(0.79, 0.81) | 8.11<br>(6.15, 10.70)   | 4.02<br>(3.24, 4.99)    |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 139 | 0.15<br>(0.15, 0.15) | 4.29<br>(3.33, 5.51)    | 4.81<br>(3.82, 6.06)    |

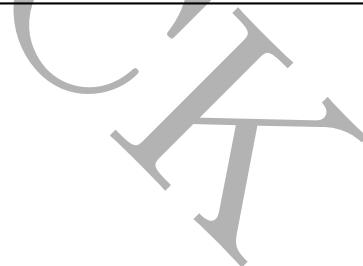


Table 8d. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Risk for Severe Covid-19

| Group                                | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR              |
|--------------------------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|------------------------|
| <b>Age, Risk for Severe Covid-19</b> |                       |         |                     |                         |     |                      |                         |                        |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 226 | 0.05<br>(0.05, 0.05) | 0.88<br>(0.70, 1.11)    | 1.33<br>(1.21, 1.47)   |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 226 | 0.80<br>(0.80, 0.80) | 11.21<br>(9.32, 13.48)  | 4.80<br>(4.07, 5.67)   |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 226 | 0.15<br>(0.15, 0.15) | 6.37<br>(5.24, 7.73)    | 7.04<br>(5.84, 8.48)   |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 69  | 0.05<br>(0.05, 0.06) | 1.80<br>(1.22, 2.64)    | 1.54<br>(1.24, 1.92)   |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 0.80<br>(0.80, 0.80) | 24.92<br>(18.62, 33.36) | 9.84<br>(7.33, 13.20)  |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 69  | 0.15<br>(0.15, 0.15) | 10.40<br>(7.91, 13.67)  | 11.21<br>(8.50, 14.78) |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 26  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)   |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 26  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)   |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 26  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)   |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69  | 0.05<br>(0.05, 0.05) | 0.66<br>(0.45, 0.98)    | 1.20<br>(1.07, 1.33)   |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69  | 0.80<br>(0.80, 0.80) | 7.06<br>(5.28, 9.43)    | 3.07<br>(2.34, 4.02)   |
| Age 18 - 59 At-risk                  | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69  | 0.15<br>(0.15, 0.15) | 3.41<br>(2.58, 4.52)    | 3.82<br>(2.90, 5.03)   |
| Age 18 - 59 Not at-risk              | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 0.05<br>(0.05, 0.05) | 0.99<br>(0.79, 1.23)    | 1.31<br>(1.21, 1.41)   |
| Age 18 - 59 Not at-risk              | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 0.80<br>(0.80, 0.80) | 10.54<br>(8.66, 12.82)  | 4.50<br>(3.78, 5.36)   |
| Age 18 - 59 Not at-risk              | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 0.15<br>(0.15, 0.15) | 5.86<br>(4.92, 6.99)    | 6.31<br>(5.30, 7.52)   |

(continued)

| Group                   | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|-------------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| Age 18 - 59 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 72  | 0.05<br>(0.05, 0.05) | 1.74<br>(1.10, 2.75)    | 1.74<br>(1.36, 2.21)    |
| Age 18 - 59 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 72  | 0.80<br>(0.80, 0.80) | 17.82<br>(12.58, 25.23) | 7.49<br>(5.42, 10.33)   |
| Age 18 - 59 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 72  | 0.15<br>(0.15, 0.15) | 10.34<br>(7.83, 13.65)  | 11.33<br>(8.65, 14.86)  |
| Age 18 - 59 Not at-risk | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 Not at-risk | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 Not at-risk | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 Not at-risk | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 70  | 0.05<br>(0.05, 0.05) | 0.44<br>(0.29, 0.65)    | 1.12<br>(1.02, 1.24)    |
| Age 18 - 59 Not at-risk | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 0.80<br>(0.79, 0.81) | 4.62<br>(3.24, 6.58)    | 2.52<br>(1.96, 3.25)    |
| Age 18 - 59 Not at-risk | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 70  | 0.15<br>(0.15, 0.15) | 2.51<br>(1.80, 3.50)    | 2.95<br>(2.22, 3.94)    |
| Age $\geq$ 60 At-risk   | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 228 | 0.05<br>(0.05, 0.05) | 2.93<br>(2.27, 3.79)    | 2.22<br>(1.87, 2.63)    |
| Age $\geq$ 60 At-risk   | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 228 | 0.80<br>(0.80, 0.80) | 40.07<br>(32.47, 49.44) | 15.90<br>(12.90, 19.59) |
| Age $\geq$ 60 At-risk   | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 228 | 0.15<br>(0.15, 0.15) | 20.22<br>(17.20, 23.77) | 21.75<br>(18.44, 25.64) |
| Age $\geq$ 60 At-risk   | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 0.05<br>(0.05, 0.05) | 4.73<br>(3.07, 7.28)    | 2.92<br>(2.10, 4.05)    |
| Age $\geq$ 60 At-risk   | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 0.80<br>(0.80, 0.80) | 62.08<br>(43.89, 87.80) | 24.07<br>(16.76, 34.57) |
| Age $\geq$ 60 At-risk   | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 0.15<br>(0.15, 0.15) | 32.45<br>(25.59, 41.17) | 35.22<br>(27.77, 44.68) |

(continued)

| Group                | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|----------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| Age ≥ 60 At-risk     | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 27  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 At-risk     | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 27  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 At-risk     | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 27  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 At-risk     | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 72  | 0.05<br>(0.05, 0.06) | 3.60<br>(2.43, 5.33)    | 2.29<br>(1.78, 2.95)    |
| Age ≥ 60 At-risk     | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 72  | 0.80<br>(0.80, 0.80) | 35.83<br>(24.46, 52.47) | 14.28<br>(9.74, 20.93)  |
| Age ≥ 60 At-risk     | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 72  | 0.15<br>(0.15, 0.16) | 21.81<br>(16.61, 28.64) | 23.67<br>(18.02, 31.08) |
| Age ≥ 60 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 232 | 0.05<br>(0.05, 0.05) | 3.02<br>(2.36, 3.86)    | 2.27<br>(1.94, 2.66)    |
| Age ≥ 60 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 232 | 0.80<br>(0.80, 0.80) | 41.01<br>(33.61, 50.04) | 16.24<br>(13.30, 19.83) |
| Age ≥ 60 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 232 | 0.15<br>(0.15, 0.15) | 21.17<br>(17.96, 24.94) | 22.89<br>(19.41, 26.99) |
| Age ≥ 60 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 0.05<br>(0.05, 0.05) | 5.21<br>(3.36, 8.07)    | 2.99<br>(2.15, 4.17)    |
| Age ≥ 60 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 0.82<br>(0.78, 0.87) | 63.79<br>(44.40, 91.66) | 26.22<br>(18.72, 36.72) |
| Age ≥ 60 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 0.15<br>(0.15, 0.15) | 28.30<br>(20.07, 39.92) | 31.33<br>(22.63, 43.37) |
| Age ≥ 60 Not at-risk | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 Not at-risk | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 Not at-risk | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |

(continued)

| Group                     | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR              |
|---------------------------|-----------------------|---------|---------------------|-------------------------|----|----------------------|-------------------------|------------------------|
| Age $\geq$ 60 Not at-risk | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69 | 0.05<br>(0.05, 0.05) | 1.91<br>(1.19, 3.09)    | 1.81<br>(1.39, 2.36)   |
| Age $\geq$ 60 Not at-risk | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69 | 0.80<br>(0.80, 0.80) | 24.45<br>(16.12, 37.10) | 10.00<br>(6.78, 14.75) |
| Age $\geq$ 60 Not at-risk | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69 | 0.15<br>(0.15, 0.15) | 12.20<br>(8.69, 17.11)  | 12.48<br>(8.62, 18.08) |

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               |
|------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| <b>Sex</b> |                       |         |                     |                         |     |                      |                         |                         |
| Male       | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 416 | 0.05<br>(0.05, 0.05) | 1.43<br>(1.19, 1.72)    | 1.55<br>(1.43, 1.69)    |
| Male       | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 416 | 0.80<br>(0.80, 0.80) | 17.21<br>(14.63, 20.24) | 7.16<br>(6.17, 8.31)    |
| Male       | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 416 | 0.15<br>(0.15, 0.15) | 9.36<br>(8.08, 10.84)   | 10.13<br>(8.77, 11.72)  |
| Male       | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 123 | 0.05<br>(0.05, 0.05) | 2.88<br>(1.96, 4.24)    | 2.23<br>(1.78, 2.80)    |
| Male       | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 123 | 0.80<br>(0.80, 0.80) | 31.72<br>(23.68, 42.49) | 12.97<br>(9.77, 17.22)  |
| Male       | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 123 | 0.15<br>(0.15, 0.15) | 16.03<br>(12.43, 20.69) | 17.73<br>(13.90, 22.63) |
| Male       | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 55  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Male       | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 55  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Male       | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 55  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Male       | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 126 | 0.05<br>(0.05, 0.05) | 0.88<br>(0.61, 1.27)    | 1.41<br>(1.23, 1.61)    |
| Male       | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 126 | 0.80<br>(0.79, 0.81) | 9.77<br>(7.11, 13.44)   | 4.52<br>(3.47, 5.90)    |
| Male       | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 126 | 0.15<br>(0.15, 0.15) | 5.33<br>(4.08, 6.96)    | 5.75<br>(4.41, 7.49)    |
| Female     | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 497 | 0.05<br>(0.05, 0.05) | 1.38<br>(1.17, 1.64)    | 1.62<br>(1.49, 1.75)    |
| Female     | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 497 | 0.80<br>(0.80, 0.80) | 16.98<br>(14.69, 19.63) | 7.08<br>(6.19, 8.09)    |
| Female     | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 497 | 0.15<br>(0.15, 0.15) | 9.22<br>(8.06, 10.54)   | 10.02<br>(8.77, 11.44)  |

(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)     | 160 | 0.05<br>(0.05, 0.05) | 2.30<br>(1.70, 3.09)    | 1.88<br>(1.58, 2.25)    |
| Female | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 160 | 0.80<br>(0.79, 0.82) | 28.91<br>(22.56, 37.04) | 11.71<br>(9.28, 14.78)  |
| Female | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 160 | 0.15<br>(0.15, 0.15) | 14.17<br>(11.60, 17.32) | 15.33<br>(12.54, 18.74) |
| Female | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 54  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Female | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 54  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Female | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 54  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Female | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 154 | 0.05<br>(0.05, 0.05) | 0.87<br>(0.63, 1.18)    | 1.36<br>(1.23, 1.52)    |
| Female | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 154 | 0.80<br>(0.80, 0.80) | 9.31<br>(7.08, 12.24)   | 4.34<br>(3.48, 5.42)    |
| Female | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 154 | 0.15<br>(0.15, 0.15) | 4.75<br>(3.65, 6.18)    | 5.45<br>(4.30, 6.92)    |

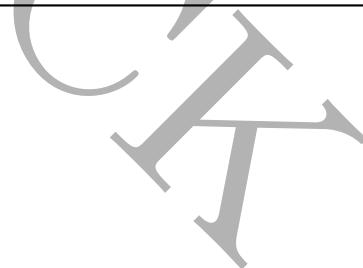


Table 8f. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, sex

| Group              | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR              |
|--------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|------------------------|
| <b>Age, sex</b>    |                       |         |                     |                         |     |                      |                         |                        |
| Age 18 - 59 Female | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 238 | 0.05<br>(0.05, 0.05) | 0.91<br>(0.73, 1.13)    | 1.31<br>(1.21, 1.42)   |
| Age 18 - 59 Female | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 238 | 0.80<br>(0.80, 0.80) | 10.17<br>(8.45, 12.25)  | 4.37<br>(3.70, 5.15)   |
| Age 18 - 59 Female | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 238 | 0.15<br>(0.15, 0.15) | 5.84<br>(4.88, 6.98)    | 6.36<br>(5.33, 7.58)   |
| Age 18 - 59 Female | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 79  | 0.05<br>(0.05, 0.05) | 1.66<br>(1.12, 2.46)    | 1.57<br>(1.27, 1.96)   |
| Age 18 - 59 Female | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 79  | 0.80<br>(0.80, 0.80) | 19.70<br>(14.23, 27.28) | 8.03<br>(5.93, 10.87)  |
| Age 18 - 59 Female | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 79  | 0.15<br>(0.15, 0.15) | 10.12<br>(7.91, 12.94)  | 10.81<br>(8.40, 13.92) |
| Age 18 - 59 Female | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 23  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)   |
| Age 18 - 59 Female | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 23  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)   |
| Age 18 - 59 Female | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 23  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)   |
| Age 18 - 59 Female | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 73  | 0.05<br>(0.05, 0.05) | 0.50<br>(0.33, 0.75)    | 1.16<br>(1.04, 1.30)   |
| Age 18 - 59 Female | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 73  | 0.80<br>(0.80, 0.80) | 5.30<br>(3.71, 7.58)    | 2.71<br>(2.07, 3.56)   |
| Age 18 - 59 Female | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 73  | 0.15<br>(0.15, 0.15) | 2.63<br>(1.87, 3.69)    | 3.16<br>(2.35, 4.24)   |
| Age 18 - 59 Male   | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 215 | 0.05<br>(0.05, 0.05) | 0.98<br>(0.77, 1.25)    | 1.33<br>(1.21, 1.46)   |
| Age 18 - 59 Male   | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 215 | 0.80<br>(0.80, 0.80) | 11.55<br>(9.37, 14.25)  | 4.92<br>(4.08, 5.93)   |
| Age 18 - 59 Male   | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 215 | 0.15<br>(0.15, 0.15) | 6.32<br>(5.22, 7.66)    | 6.87<br>(5.69, 8.30)   |

(continued)

| Group            | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| Age 18 - 59 Male | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 62  | 0.05<br>(0.05, 0.06) | 1.92<br>(1.15, 3.20)    | 1.77<br>(1.35, 2.32)    |
| Age 18 - 59 Male | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 62  | 0.80<br>(0.80, 0.80) | 21.34<br>(14.85, 30.68) | 8.81<br>(6.23, 12.46)   |
| Age 18 - 59 Male | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 62  | 0.15<br>(0.15, 0.15) | 10.70<br>(7.70, 14.87)  | 11.94<br>(8.75, 16.30)  |
| Age 18 - 59 Male | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 31  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 Male | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 31  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 Male | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 31  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 Male | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 66  | 0.05<br>(0.05, 0.05) | 0.54<br>(0.35, 0.83)    | 1.14<br>(1.04, 1.25)    |
| Age 18 - 59 Male | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 66  | 0.80<br>(0.79, 0.82) | 5.70<br>(4.04, 8.05)    | 2.75<br>(2.11, 3.59)    |
| Age 18 - 59 Male | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 66  | 0.15<br>(0.15, 0.15) | 3.12<br>(2.31, 4.22)    | 3.43<br>(2.57, 4.56)    |
| Age ≥ 60 Female  | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 259 | 0.05<br>(0.05, 0.05) | 2.94<br>(2.28, 3.79)    | 2.35<br>(1.99, 2.77)    |
| Age ≥ 60 Female  | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 259 | 0.80<br>(0.80, 0.80) | 42.41<br>(34.81, 51.66) | 16.78<br>(13.76, 20.47) |
| Age ≥ 60 Female  | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 259 | 0.15<br>(0.15, 0.15) | 20.86<br>(17.74, 24.54) | 22.58<br>(19.19, 26.58) |
| Age ≥ 60 Female  | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 81  | 0.05<br>(0.05, 0.05) | 4.16<br>(2.76, 6.28)    | 2.61<br>(1.94, 3.51)    |
| Age ≥ 60 Female  | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 81  | 0.82<br>(0.78, 0.86) | 58.11<br>(41.55, 81.27) | 23.29<br>(16.91, 32.08) |
| Age ≥ 60 Female  | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 81  | 0.15<br>(0.15, 0.15) | 26.18<br>(19.12, 35.85) | 28.96<br>(21.55, 38.92) |

(continued)

| Group           | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC    | GMTR/GMCR               |
|-----------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|--------------------------|-------------------------|
| Age ≥ 60 Female | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 31  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)     | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 Female | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 31  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)     | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 Female | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 31  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)     | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 Female | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 81  | 0.05<br>(0.05, 0.05) | 2.52<br>(1.73, 3.68)     | 1.86<br>(1.51, 2.29)    |
| Age ≥ 60 Female | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 81  | 0.80<br>(0.80, 0.80) | 27.65<br>(20.60, 37.10)  | 10.77<br>(7.93, 14.63)  |
| Age ≥ 60 Female | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 81  | 0.15<br>(0.15, 0.15) | 14.91<br>(11.39, 19.53)  | 15.69<br>(11.73, 20.99) |
| Age ≥ 60 Male   | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 201 | 0.05<br>(0.05, 0.05) | 3.03<br>(2.35, 3.91)     | 2.13<br>(1.81, 2.51)    |
| Age ≥ 60 Male   | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 201 | 0.80<br>(0.80, 0.80) | 38.47<br>(31.05, 47.65)  | 15.28<br>(12.35, 18.90) |
| Age ≥ 60 Male   | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 201 | 0.15<br>(0.15, 0.15) | 20.68<br>(17.44, 24.52)  | 22.21<br>(18.68, 26.42) |
| Age ≥ 60 Male   | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 61  | 0.05<br>(0.05, 0.05) | 6.59<br>(4.21, 10.32)    | 3.58<br>(2.45, 5.22)    |
| Age ≥ 60 Male   | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 61  | 0.80<br>(0.80, 0.80) | 71.36<br>(48.36, 105.31) | 28.66<br>(19.50, 42.12) |
| Age ≥ 60 Male   | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 61  | 0.15<br>(0.15, 0.15) | 36.72<br>(27.52, 48.99)  | 39.85<br>(29.87, 53.16) |
| Age ≥ 60 Male   | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 24  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)     | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 Male   | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 24  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)     | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 Male   | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 24  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)     | 1.00<br>(1.00, 1.00)    |

(continued)

| Group         | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|---------------|-----------------------|---------|---------------------|-------------------------|----|----------------------|-------------------------|-------------------------|
| Age ≥ 60 Male | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 60 | 0.05<br>(0.05, 0.05) | 2.38<br>(1.32, 4.27)    | 2.16<br>(1.56, 3.01)    |
| Age ≥ 60 Male | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 60 | 0.80<br>(0.80, 0.80) | 29.49<br>(17.05, 51.02) | 12.51<br>(7.65, 20.45)  |
| Age ≥ 60 Male | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 60 | 0.15<br>(0.15, 0.16) | 15.93<br>(10.61, 23.92) | 16.60<br>(10.73, 25.70) |

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               |
|-------------------------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| <b>Hispanic or Latino ethnicity</b> |                       |         |                     |                         |     |                      |                         |                         |
| Hispanic or Latino                  | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 374 | 0.05<br>(0.05, 0.05) | 1.48<br>(1.24, 1.77)    | 1.54<br>(1.42, 1.67)    |
| Hispanic or Latino                  | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 374 | 0.80<br>(0.80, 0.80) | 17.87<br>(15.17, 21.05) | 7.60<br>(6.55, 8.81)    |
| Hispanic or Latino                  | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 374 | 0.15<br>(0.15, 0.15) | 9.55<br>(8.26, 11.04)   | 10.24<br>(8.85, 11.85)  |
| Hispanic or Latino                  | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 106 | 0.05<br>(0.05, 0.05) | 2.07<br>(1.41, 3.02)    | 1.71<br>(1.40, 2.10)    |
| Hispanic or Latino                  | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 106 | 0.80<br>(0.80, 0.80) | 26.47<br>(19.85, 35.29) | 10.79<br>(8.23, 14.14)  |
| Hispanic or Latino                  | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 106 | 0.15<br>(0.15, 0.15) | 14.30<br>(11.44, 17.89) | 15.52<br>(12.42, 19.39) |
| Hispanic or Latino                  | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 44  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Hispanic or Latino                  | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 44  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Hispanic or Latino                  | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 44  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Hispanic or Latino                  | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 105 | 0.05<br>(0.05, 0.05) | 0.81<br>(0.57, 1.15)    | 1.35<br>(1.20, 1.52)    |
| Hispanic or Latino                  | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 105 | 0.80<br>(0.80, 0.80) | 9.25<br>(6.85, 12.50)   | 4.29<br>(3.34, 5.50)    |
| Hispanic or Latino                  | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 105 | 0.15<br>(0.15, 0.15) | 5.02<br>(3.84, 6.56)    | 5.47<br>(4.21, 7.12)    |
| Not Hispanic or Latino              | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 477 | 0.05<br>(0.05, 0.05) | 1.37<br>(1.16, 1.63)    | 1.65<br>(1.51, 1.80)    |
| Not Hispanic or Latino              | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 477 | 0.80<br>(0.80, 0.80) | 16.37<br>(14.27, 18.78) | 6.65<br>(5.84, 7.58)    |
| Not Hispanic or Latino              | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 477 | 0.15<br>(0.15, 0.15) | 9.23<br>(8.11, 10.50)   | 10.02<br>(8.83, 11.37)  |

(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)     | 164 | 0.05<br>(0.05, 0.05) | 3.09<br>(2.24, 4.24)    | 2.45<br>(2.00, 3.01)    |
| Not Hispanic or Latino   | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 164 | 0.81<br>(0.79, 0.83) | 36.03<br>(27.77, 46.75) | 14.80<br>(11.60, 18.89) |
| Not Hispanic or Latino   | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 164 | 0.15<br>(0.15, 0.15) | 15.94<br>(12.70, 20.00) | 17.53<br>(14.06, 21.84) |
| Not Hispanic or Latino   | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Not Hispanic or Latino   | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Not Hispanic or Latino   | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Not Hispanic or Latino   | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 152 | 0.05<br>(0.05, 0.05) | 1.06<br>(0.74, 1.51)    | 1.48<br>(1.30, 1.69)    |
| Not Hispanic or Latino   | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 152 | 0.80<br>(0.79, 0.81) | 10.83<br>(8.01, 14.64)  | 5.15<br>(4.04, 6.57)    |
| Not Hispanic or Latino   | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 152 | 0.15<br>(0.15, 0.15) | 5.11<br>(3.81, 6.86)    | 5.95<br>(4.68, 7.58)    |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 62  | 0.05<br>(0.05, 0.05) | 1.03<br>(0.60, 1.79)    | 1.53<br>(1.24, 1.89)    |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 62  | 0.80<br>(0.80, 0.80) | 15.50<br>(10.38, 23.14) | 6.41<br>(4.41, 9.30)    |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 62  | 0.16<br>(0.15, 0.16) | 7.49<br>(4.99, 11.25)   | 9.04<br>(6.43, 12.72)   |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 13  | 0.05<br>(0.05, 0.05) | 2.45<br>(1.39, 4.30)    | 1.51<br>(1.05, 2.17)    |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 13  | 0.80<br>(0.80, 0.80) | 17.50<br>(9.29, 32.94)  | 6.33<br>(2.95, 13.59)   |

(continued)

| Group                    | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC  | GMTR/GMCR              |
|--------------------------|-----------------------|---------|---------------------|-------------------------|----|----------------------|------------------------|------------------------|
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 13 | 0.15<br>(0.15, 0.15) | 11.83<br>(6.16, 22.73) | 12.84<br>(6.68, 24.66) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 9  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)   | 1.00<br>(1.00, 1.00)   |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 9  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)   | 1.00<br>(1.00, 1.00)   |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 9  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)   | 1.00<br>(1.00, 1.00)   |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 23 | 0.05<br>(0.05, 0.05) | 0.53<br>(0.32, 0.89)   | 1.15<br>(0.99, 1.34)   |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 23 | 0.80<br>(0.80, 0.80) | 6.17<br>(3.91, 9.75)   | 2.62<br>(1.75, 3.93)   |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 23 | 0.15<br>(0.15, 0.15) | 4.41<br>(2.97, 6.55)   | 4.70<br>(3.18, 6.95)   |

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               |
|---------------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| <b>Race</b>               |                       |         |                     |                         |     |                      |                         |                         |
| White Non-Hispanic        | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 196 | 0.05<br>(0.05, 0.05) | 1.50<br>(1.13, 1.98)    | 1.80<br>(1.56, 2.08)    |
| White Non-Hispanic        | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 196 | 0.80<br>(0.80, 0.80) | 17.65<br>(14.16, 22.00) | 7.33<br>(5.97, 9.01)    |
| White Non-Hispanic        | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 196 | 0.15<br>(0.15, 0.15) | 9.28<br>(7.55, 11.41)   | 10.30<br>(8.46, 12.53)  |
| White Non-Hispanic        | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 63  | 0.05<br>(0.05, 0.05) | 3.69<br>(2.18, 6.25)    | 2.83<br>(1.98, 4.05)    |
| White Non-Hispanic        | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 63  | 0.82<br>(0.78, 0.86) | 45.03<br>(30.91, 65.61) | 17.94<br>(12.42, 25.91) |
| White Non-Hispanic        | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 63  | 0.15<br>(0.15, 0.15) | 17.98<br>(12.82, 25.22) | 19.97<br>(14.53, 27.46) |
| White Non-Hispanic        | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 23  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| White Non-Hispanic        | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 23  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| White Non-Hispanic        | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 23  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| White Non-Hispanic        | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 56  | 0.05<br>(0.05, 0.05) | 1.16<br>(0.67, 2.02)    | 1.57<br>(1.25, 1.98)    |
| White Non-Hispanic        | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 56  | 0.80<br>(0.80, 0.80) | 12.32<br>(7.77, 19.56)  | 5.50<br>(3.69, 8.22)    |
| White Non-Hispanic        | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 56  | 0.15<br>(0.15, 0.15) | 5.02<br>(3.41, 7.38)    | 5.70<br>(4.04, 8.03)    |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 332 | 0.05<br>(0.05, 0.05) | 1.33<br>(1.10, 1.62)    | 1.53<br>(1.40, 1.67)    |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 332 | 0.80<br>(0.80, 0.80) | 16.19<br>(13.79, 18.99) | 6.48<br>(5.55, 7.57)    |

(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            | Anti Spike IgG (BAU/ml) | 332 | 0.15<br>(0.15, 0.15) | 9.18<br>(7.98, 10.57)   | 9.83<br>(8.54, 11.31)   |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 111 | 0.05<br>(0.05, 0.05) | 1.82<br>(1.24, 2.66)    | 1.84<br>(1.53, 2.21)    |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 111 | 0.80<br>(0.80, 0.80) | 20.44<br>(14.38, 29.07) | 8.91<br>(6.64, 11.95)   |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 111 | 0.15<br>(0.15, 0.15) | 12.52<br>(9.57, 16.39)  | 13.64<br>(10.44, 17.80) |
| Black or African American | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 38  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Black or African American | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 38  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Black or African American | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 38  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 94  | 0.05<br>(0.05, 0.05) | 0.93<br>(0.57, 1.49)    | 1.41<br>(1.20, 1.66)    |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 94  | 0.81<br>(0.79, 0.82) | 10.46<br>(6.88, 15.91)  | 4.80<br>(3.34, 6.89)    |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 94  | 0.15<br>(0.15, 0.15) | 4.71<br>(3.31, 6.71)    | 5.23<br>(3.69, 7.42)    |
| Asian                     | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 18  | 0.05<br>(0.05, 0.05) | 2.15<br>(1.01, 4.58)    | 1.60<br>(0.95, 2.69)    |
| Asian                     | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 18  | 0.80<br>(0.80, 0.80) | 20.66<br>(10.86, 39.30) | 7.82<br>(3.95, 15.48)   |
| Asian                     | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 18  | 0.15<br>(0.15, 0.15) | 10.30<br>(6.01, 17.63)  | 11.42<br>(6.84, 19.08)  |

(continued)

| Group                            | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC    | GMTR/GMCR              |
|----------------------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|--------------------------|------------------------|
| Asian                            | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 5   | 0.07<br>(0.04, 0.12) | 3.89<br>(2.24, 6.74)     | 1.53<br>(0.88, 2.65)   |
| Asian                            | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 5   | 0.80<br>(0.80, 0.80) | 52.83<br>(12.92, 215.97) | 18.19<br>(3.57, 92.66) |
| Asian                            | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 5   | 0.15<br>(0.15, 0.15) | 24.28<br>(8.61, 68.46)   | 26.35<br>(9.35, 74.29) |
| Asian                            | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2   | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)     | 1.00<br>(1.00, 1.00)   |
| Asian                            | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)     | 1.00<br>(1.00, 1.00)   |
| Asian                            | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2   | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)     | 1.00<br>(1.00, 1.00)   |
| Asian                            | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 10  | 0.05<br>(0.05, 0.05) | 0.51<br>(0.16, 1.61)     | 1.34<br>(0.91, 1.97)   |
| Asian                            | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 10  | 0.80<br>(0.80, 0.80) | 6.07<br>(2.15, 17.12)    | 3.14<br>(1.49, 6.63)   |
| Asian                            | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 10  | 0.15<br>(0.15, 0.15) | 5.58<br>(2.70, 11.54)    | 6.05<br>(2.93, 12.52)  |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 149 | 0.05<br>(0.05, 0.05) | 1.34<br>(1.01, 1.79)     | 1.51<br>(1.34, 1.71)   |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 149 | 0.80<br>(0.80, 0.80) | 16.66<br>(12.81, 21.68)  | 7.23<br>(5.72, 9.13)   |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 149 | 0.15<br>(0.15, 0.15) | 8.81<br>(6.94, 11.18)    | 9.43<br>(7.43, 11.97)  |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 49  | 0.05<br>(0.05, 0.05) | 2.79<br>(1.56, 4.98)     | 2.17<br>(1.56, 3.03)   |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 49  | 0.80<br>(0.80, 0.80) | 34.07<br>(22.72, 51.09)  | 13.32<br>(8.76, 20.24) |

(continued)

| Group                                     | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|---|-----------------------|---------|---------------------|-------------------------|----|----------------------|-------------------------|-------------------------|
| American Indian or Alaska Native          | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 49 | 0.15<br>(0.15, 0.15) | 14.32<br>(10.15, 20.21) | 15.66<br>(11.16, 21.98) |
| American Indian or Alaska Native          | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 18 | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| American Indian or Alaska Native          | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 18 | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| American Indian or Alaska Native          | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 18 | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| American Indian or Alaska Native          | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 48 | 0.05<br>(0.05, 0.05) | 0.70<br>(0.43, 1.15)    | 1.31<br>(1.13, 1.52)    |
| American Indian or Alaska Native          | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 48 | 0.80<br>(0.80, 0.80) | 9.20<br>(6.04, 14.01)   | 4.24<br>(3.02, 5.94)    |
| American Indian or Alaska Native          | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 48 | 0.15<br>(0.15, 0.15) | 4.46<br>(2.94, 6.77)    | 5.13<br>(3.55, 7.41)    |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 2  | 0.05<br>(0.05, 0.05) | 2.86<br>(1.01, 8.14)    | 1.68<br>(0.93, 3.05)    |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0.80<br>(0.80, 0.80) | 24.67<br>(9.77, 62.29)  | 9.82<br>(3.89, 24.79)   |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0.15<br>(0.15, 0.15) | 10.65<br>(8.80, 12.90)  | 11.56<br>(9.55, 14.00)  |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05) | 3.09<br>(3.09, 3.09)    | 1.00<br>(1.00, 1.00)    |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80) | 18.62<br>(18.62, 18.62) | 7.41<br>(7.41, 7.41)    |

(continued)

| Group                                     | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|---|-----------------------|---------|---------------------|-------------------------|----|----------------------|-------------------------|-------------------------|
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15) | 12.15<br>(12.15, 12.15) | 13.18<br>(13.18, 13.18) |
| Multiracial                               | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 25 | 0.05<br>(0.05, 0.05) | 1.26<br>(0.63, 2.52)    | 1.60<br>(1.15, 2.24)    |
| Multiracial                               | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 25 | 0.80<br>(0.80, 0.80) | 16.70<br>(10.38, 26.86) | 7.00<br>(4.53, 10.81)   |
| Multiracial                               | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 25 | 0.15<br>(0.15, 0.15) | 11.25<br>(6.17, 20.52)  | 12.72<br>(7.16, 22.62)  |
| Multiracial                               | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 9  | 0.05<br>(0.05, 0.05) | 2.79<br>(1.15, 6.76)    | 1.83<br>(1.08, 3.08)    |
| Multiracial                               | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 9  | 0.80<br>(0.80, 0.80) | 35.72<br>(15.57, 81.92) | 13.49<br>(5.68, 32.02)  |
| Multiracial                               | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 9  | 0.15<br>(0.15, 0.15) | 9.78<br>(5.54, 17.26)   | 10.62<br>(6.02, 18.73)  |
| Multiracial                               | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Multiracial                               | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Multiracial                               | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Multiracial                               | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 15 | 0.05<br>(0.05, 0.05) | 1.85<br>(0.49, 6.95)    | 1.99<br>(0.90, 4.38)    |
| Multiracial                               | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 15 | 0.80<br>(0.80, 0.80) | 16.42<br>(6.17, 43.75)  | 7.21<br>(3.09, 16.87)   |
| Multiracial                               | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 15 | 0.15<br>(0.15, 0.15) | 7.36<br>(2.96, 18.26)   | 8.00<br>(3.21, 19.93)   |
| Not reported and unknown                  | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 12 | 0.05<br>(0.05, 0.05) | 2.50<br>(0.90, 6.94)    | 2.05<br>(1.22, 3.44)    |
| Not reported and unknown                  | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 12 | 0.80<br>(0.80, 0.80) | 21.32<br>(14.43, 31.50) | 8.49<br>(5.75, 12.54)   |

(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            | Anti Spike IgG (BAU/ml) | 12 | 0.15<br>(0.15, 0.15) | 20.41<br>(12.24, 34.04) | 22.15<br>(13.28, 36.95) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05) | 1.70<br>(1.70, 1.70)    | 1.00<br>(1.00, 1.00)    |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80) | 30.53<br>(30.53, 30.53) | 12.15<br>(12.15, 12.15) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15) | 26.52<br>(26.52, 26.52) | 28.78<br>(28.78, 28.78) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 2  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 2  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 2  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 4  | 0.05<br>(0.05, 0.05) | 2.85<br>(1.31, 6.21)    | 1.41<br>(0.85, 2.34)    |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 4  | 0.80<br>(0.80, 0.80) | 8.77<br>(4.28, 17.98)   | 3.53<br>(1.76, 7.09)    |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 4  | 0.15<br>(0.15, 0.15) | 15.88<br>(13.13, 19.20) | 17.23<br>(14.25, 20.84) |

Table 8i. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Underrepresented Minority Status in the U.S.

| Group   | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR              |
|---|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|------------------------|
| <b>Underrepresented Minority Status in the U.S.</b> |                       |         |                     |                         |     |                      |                         |                        |
| URM   | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 0.05<br>(0.05, 0.05) | 1.33<br>(1.07, 1.66)    | 1.47<br>(1.33, 1.64)   |
| URM   | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 0.80<br>(0.80, 0.80) | 15.83<br>(13.04, 19.22) | 6.51<br>(5.44, 7.80)   |
| URM   | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 0.15<br>(0.15, 0.15) | 9.26<br>(7.76, 11.04)   | 10.03<br>(8.42, 11.95) |
| URM   | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 0.05<br>(0.05, 0.05) | 1.60<br>(1.06, 2.41)    | 1.51<br>(1.27, 1.80)   |
| URM   | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 0.80<br>(0.80, 0.80) | 17.64<br>(12.36, 25.18) | 7.55<br>(5.54, 10.29)  |
| URM   | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 0.15<br>(0.15, 0.15) | 12.18<br>(9.07, 16.36)  | 12.89<br>(9.46, 17.55) |
| URM   | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)   |
| URM   | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)   |
| URM   | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)   |
| URM   | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 70  | 0.05<br>(0.05, 0.06) | 0.93<br>(0.65, 1.32)    | 1.32<br>(1.16, 1.50)   |
| URM   | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 0.80<br>(0.80, 0.80) | 10.38<br>(7.41, 14.55)  | 4.61<br>(3.45, 6.16)   |
| URM   | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 70  | 0.15<br>(0.15, 0.15) | 4.59<br>(3.28, 6.41)    | 5.42<br>(4.04, 7.27)   |
| Non-URM   | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 227 | 0.05<br>(0.05, 0.05) | 1.36<br>(1.05, 1.77)    | 1.74<br>(1.53, 1.98)   |
| Non-URM   | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 227 | 0.80<br>(0.80, 0.80) | 16.64<br>(13.58, 20.37) | 7.03<br>(5.83, 8.47)   |

(continued)

| Group   | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|---------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| Non-URM | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 227 | 0.15<br>(0.15, 0.15) | 8.85<br>(7.31, 10.73)   | 10.06<br>(8.43, 12.00)  |
| Non-URM | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 71  | 0.05<br>(0.05, 0.05) | 3.92<br>(2.47, 6.21)    | 2.74<br>(2.01, 3.74)    |
| Non-URM | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 0.82<br>(0.78, 0.85) | 47.58<br>(34.24, 66.13) | 18.96<br>(13.75, 26.15) |
| Non-URM | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 71  | 0.15<br>(0.15, 0.15) | 17.81<br>(13.03, 24.36) | 19.75<br>(14.71, 26.52) |
| Non-URM | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 28  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Non-URM | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 28  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Non-URM | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 28  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Non-URM | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 71  | 0.05<br>(0.05, 0.05) | 1.05<br>(0.65, 1.70)    | 1.55<br>(1.28, 1.87)    |
| Non-URM | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 71  | 0.80<br>(0.80, 0.80) | 10.56<br>(7.07, 15.79)  | 4.94<br>(3.53, 6.92)    |
| Non-URM | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 71  | 0.15<br>(0.15, 0.15) | 5.08<br>(3.67, 7.03)    | 5.75<br>(4.30, 7.69)    |

Table 8j. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Underrepresented Minority Status in the U.S.

| Group  | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC  | GMTR/GMCR             |
|--|-----------------------|---------|---------------------|-------------------------|-----|----------------------|------------------------|-----------------------|
| <b>Age, Underrepresented Minority Status in the U.S.</b> |                       |         |                     |                         |     |                      |                        |                       |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 113 | 0.05<br>(0.05, 0.05) | 0.95<br>(0.71, 1.28)   | 1.31<br>(1.16, 1.47)  |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 113 | 0.80<br>(0.80, 0.80) | 10.76<br>(8.28, 13.99) | 4.51<br>(3.55, 5.73)  |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 113 | 0.15<br>(0.15, 0.15) | 6.41<br>(5.02, 8.18)   | 6.96<br>(5.47, 8.86)  |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 36  | 0.05<br>(0.05, 0.05) | 1.12<br>(0.65, 1.93)   | 1.31<br>(1.08, 1.58)  |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 0.80<br>(0.80, 0.80) | 10.28<br>(6.59, 16.03) | 4.56<br>(3.16, 6.58)  |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 36  | 0.15<br>(0.15, 0.15) | 7.81<br>(5.31, 11.49)  | 8.17<br>(5.44, 12.28) |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)   | 1.00<br>(1.00, 1.00)  |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)   | 1.00<br>(1.00, 1.00)  |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)   | 1.00<br>(1.00, 1.00)  |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.05<br>(0.04, 0.06) | 0.47<br>(0.29, 0.75)   | 1.07<br>(0.94, 1.21)  |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 0.80<br>(0.80, 0.80) | 5.34<br>(3.44, 8.28)   | 2.54<br>(1.79, 3.60)  |
| Age 18 - 59 URM  | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 0.15<br>(0.15, 0.15) | 2.09<br>(1.35, 3.24)   | 2.60<br>(1.81, 3.75)  |
| Age 18 - 59 Non-URM                                      | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 111 | 0.05<br>(0.05, 0.05) | 0.93<br>(0.65, 1.31)   | 1.49<br>(1.28, 1.73)  |
| Age 18 - 59 Non-URM                                      | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 111 | 0.80<br>(0.80, 0.80) | 10.19<br>(7.79, 13.33) | 4.41<br>(3.45, 5.62)  |

(continued)

| Group               | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC    | GMTR/GMCR               |
|---------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|--------------------------|-------------------------|
| Age 18 - 59 Non-URM | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 111 | 0.15<br>(0.15, 0.15) | 5.89<br>(4.51, 7.70)     | 6.88<br>(5.41, 8.75)    |
| Age 18 - 59 Non-URM | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.05<br>(0.05, 0.05) | 3.04<br>(1.60, 5.79)     | 2.26<br>(1.47, 3.46)    |
| Age 18 - 59 Non-URM | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 0.80<br>(0.80, 0.80) | 33.89<br>(21.53, 53.37)  | 13.52<br>(8.71, 20.98)  |
| Age 18 - 59 Non-URM | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 35  | 0.15<br>(0.15, 0.15) | 12.01<br>(7.99, 18.06)   | 13.49<br>(9.31, 19.56)  |
| Age 18 - 59 Non-URM | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)     | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 Non-URM | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)     | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 Non-URM | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)     | 1.00<br>(1.00, 1.00)    |
| Age 18 - 59 Non-URM | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.05<br>(0.05, 0.05) | 0.70<br>(0.36, 1.36)     | 1.37<br>(1.08, 1.74)    |
| Age 18 - 59 Non-URM | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 0.80<br>(0.80, 0.80) | 6.36<br>(3.69, 10.95)    | 3.24<br>(2.10, 5.00)    |
| Age 18 - 59 Non-URM | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 0.15<br>(0.15, 0.15) | 3.16<br>(2.04, 4.87)     | 3.69<br>(2.54, 5.37)    |
| Age ≥ 60 URM        | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 114 | 0.05<br>(0.05, 0.05) | 2.50<br>(1.82, 3.42)     | 1.85<br>(1.51, 2.27)    |
| Age ≥ 60 URM        | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 114 | 0.80<br>(0.80, 0.80) | 32.68<br>(25.29, 42.23)  | 12.98<br>(10.04, 16.78) |
| Age ≥ 60 URM        | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 114 | 0.15<br>(0.15, 0.15) | 18.45<br>(14.88, 22.87)  | 19.90<br>(16.02, 24.73) |
| Age ≥ 60 URM        | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.05<br>(0.05, 0.05) | 3.64<br>(2.20, 6.03)     | 2.11<br>(1.45, 3.08)    |
| Age ≥ 60 URM        | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 0.80<br>(0.80, 0.80) | 62.80<br>(37.48, 105.23) | 24.66<br>(14.61, 41.63) |

(continued)

| Group            | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC    | GMTR/GMCR               |
|------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|--------------------------|-------------------------|
| Age ≥ 60 URM     | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 35  | 0.15<br>(0.15, 0.15) | 34.65<br>(24.94, 48.14)  | 37.60<br>(27.07, 52.24) |
| Age ≥ 60 URM     | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)     | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 URM     | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)     | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 URM     | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)     | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 URM     | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 35  | 0.05<br>(0.04, 0.05) | 3.39<br>(2.20, 5.22)     | 1.96<br>(1.49, 2.59)    |
| Age ≥ 60 URM     | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35  | 0.80<br>(0.80, 0.80) | 36.78<br>(23.53, 57.49)  | 14.28<br>(8.99, 22.70)  |
| Age ≥ 60 URM     | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 35  | 0.15<br>(0.15, 0.15) | 20.48<br>(13.85, 30.30)  | 21.84<br>(14.51, 32.89) |
| Age ≥ 60 Non-URM | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 116 | 0.05<br>(0.05, 0.05) | 2.88<br>(2.00, 4.14)     | 2.34<br>(1.84, 2.97)    |
| Age ≥ 60 Non-URM | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 116 | 0.80<br>(0.80, 0.80) | 42.70<br>(32.17, 56.68)  | 17.25<br>(13.12, 22.67) |
| Age ≥ 60 Non-URM | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 116 | 0.15<br>(0.15, 0.15) | 19.37<br>(15.50, 24.20)  | 20.91<br>(16.71, 26.17) |
| Age ≥ 60 Non-URM | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 36  | 0.05<br>(0.05, 0.05) | 5.88<br>(3.21, 10.74)    | 3.74<br>(2.43, 5.74)    |
| Age ≥ 60 Non-URM | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 36  | 0.85<br>(0.75, 0.95) | 82.09<br>(52.81, 127.62) | 32.68<br>(21.02, 50.80) |
| Age ≥ 60 Non-URM | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 36  | 0.15<br>(0.15, 0.15) | 33.58<br>(20.94, 53.86)  | 36.45<br>(22.73, 58.45) |
| Age ≥ 60 Non-URM | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 14  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)     | 1.00<br>(1.00, 1.00)    |
| Age ≥ 60 Non-URM | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 14  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)     | 1.00<br>(1.00, 1.00)    |

(continued)

| Group                 | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR              |
|-----------------------|-----------------------|---------|---------------------|-------------------------|----|----------------------|-------------------------|------------------------|
| Age $\geq$ 60 Non-URM | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 14 | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)   |
| Age $\geq$ 60 Non-URM | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 36 | 0.05<br>(0.05, 0.06) | 2.30<br>(1.30, 4.08)    | 1.95<br>(1.42, 2.67)   |
| Age $\geq$ 60 Non-URM | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 36 | 0.80<br>(0.80, 0.80) | 28.08<br>(17.06, 46.21) | 11.12<br>(6.74, 18.34) |
| Age $\geq$ 60 Non-URM | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 36 | 0.15<br>(0.15, 0.15) | 12.71<br>(8.41, 19.22)  | 13.47<br>(8.79, 20.64) |

Table 8k. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Country

| Group          | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|----------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| <b>Country</b> |                       |         |                     |                         |     |                      |                         |                         |
| United States  | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 454 | 0.05<br>(0.05, 0.05) | 1.35<br>(1.13, 1.61)    | 1.61<br>(1.48, 1.76)    |
| United States  | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 454 | 0.80<br>(0.80, 0.80) | 16.26<br>(14.12, 18.73) | 6.79<br>(5.96, 7.73)    |
| United States  | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 454 | 0.15<br>(0.15, 0.15) | 9.04<br>(7.92, 10.31)   | 10.05<br>(8.87, 11.38)  |
| United States  | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 142 | 0.05<br>(0.05, 0.05) | 2.57<br>(1.88, 3.51)    | 2.07<br>(1.72, 2.49)    |
| United States  | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 142 | 0.81<br>(0.79, 0.83) | 29.87<br>(23.41, 38.11) | 12.31<br>(9.82, 15.43)  |
| United States  | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 142 | 0.15<br>(0.15, 0.15) | 14.91<br>(12.00, 18.51) | 16.17<br>(13.06, 20.02) |
| United States  | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 56  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| United States  | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 56  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| United States  | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 56  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| United States  | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 141 | 0.05<br>(0.05, 0.05) | 0.99<br>(0.73, 1.34)    | 1.43<br>(1.27, 1.61)    |
| United States  | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 141 | 0.80<br>(0.80, 0.80) | 10.47<br>(8.05, 13.63)  | 4.78<br>(3.82, 5.97)    |
| United States  | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 141 | 0.15<br>(0.15, 0.15) | 4.83<br>(3.83, 6.10)    | 5.58<br>(4.54, 6.87)    |
| Argentina      | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 45  | 0.05<br>(0.05, 0.05) | 1.47<br>(0.91, 2.36)    | 1.56<br>(1.26, 1.93)    |
| Argentina      | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 45  | 0.80<br>(0.80, 0.80) | 19.39<br>(12.92, 29.08) | 7.49<br>(4.94, 11.36)   |
| Argentina      | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 45  | 0.15<br>(0.15, 0.15) | 10.05<br>(6.85, 14.75)  | 10.17<br>(6.69, 15.46)  |

(continued)

| Group     | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC    | GMTR/GMCR               |
|-----------|-----------------------|---------|---------------------|-------------------------|----|----------------------|--------------------------|-------------------------|
| Argentina | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 11 | 0.05<br>(0.05, 0.05) | 3.37<br>(0.76, 15.00)    | 2.83<br>(1.29, 6.20)    |
| Argentina | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 11 | 0.80<br>(0.80, 0.80) | 48.05<br>(19.88, 116.17) | 17.59<br>(6.48, 47.70)  |
| Argentina | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 11 | 0.15<br>(0.15, 0.15) | 22.23<br>(10.96, 45.09)  | 24.13<br>(11.90, 48.93) |
| Argentina | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 5  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)     | 1.00<br>(1.00, 1.00)    |
| Argentina | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 5  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)     | 1.00<br>(1.00, 1.00)    |
| Argentina | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 5  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)     | 1.00<br>(1.00, 1.00)    |
| Argentina | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 16 | 0.05<br>(0.05, 0.05) | 0.79<br>(0.33, 1.89)     | 1.21<br>(0.99, 1.49)    |
| Argentina | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 16 | 0.80<br>(0.80, 0.80) | 7.57<br>(3.41, 16.81)    | 3.97<br>(2.20, 7.18)    |
| Argentina | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 16 | 0.15<br>(0.15, 0.15) | 4.51<br>(2.20, 9.24)     | 4.72<br>(2.30, 9.65)    |
| Brazil    | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 78 | 0.05<br>(0.05, 0.05) | 1.89<br>(1.25, 2.85)     | 1.82<br>(1.47, 2.26)    |
| Brazil    | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 78 | 0.80<br>(0.80, 0.80) | 24.23<br>(17.26, 34.03)  | 10.13<br>(7.43, 13.82)  |
| Brazil    | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 78 | 0.15<br>(0.15, 0.15) | 9.82<br>(6.87, 14.04)    | 10.97<br>(7.80, 15.44)  |
| Brazil    | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 29 | 0.05<br>(0.05, 0.06) | 2.05<br>(1.26, 3.33)     | 1.47<br>(1.18, 1.83)    |
| Brazil    | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 29 | 0.80<br>(0.80, 0.80) | 25.63<br>(15.10, 43.50)  | 10.69<br>(6.73, 16.97)  |
| Brazil    | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 29 | 0.15<br>(0.15, 0.15) | 15.35<br>(9.85, 23.90)   | 16.46<br>(10.48, 25.87) |

(continued)

| Group  | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR              |
|--------|-----------------------|---------|---------------------|-------------------------|----|----------------------|-------------------------|------------------------|
| Brazil | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 15 | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)   |
| Brazil | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 15 | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)   |
| Brazil | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 15 | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)   |
| Brazil | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 30 | 0.05<br>(0.05, 0.05) | 0.61<br>(0.30, 1.23)    | 1.39<br>(1.12, 1.74)   |
| Brazil | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 30 | 0.80<br>(0.80, 0.80) | 7.43<br>(4.21, 13.11)   | 3.33<br>(2.07, 5.34)   |
| Brazil | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 30 | 0.15<br>(0.15, 0.15) | 4.73<br>(2.69, 8.31)    | 5.55<br>(3.46, 8.89)   |
| Chile  | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 13 | 0.05<br>(0.05, 0.05) | 4.14<br>(1.65, 10.37)   | 2.92<br>(1.54, 5.53)   |
| Chile  | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 13 | 0.80<br>(0.80, 0.80) | 22.09<br>(12.75, 38.27) | 8.79<br>(5.08, 15.23)  |
| Chile  | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 13 | 0.15<br>(0.15, 0.15) | 13.15<br>(6.95, 24.87)  | 13.87<br>(7.04, 27.31) |
| Chile  | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)   |
| Chile  | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)   |
| Chile  | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15) | 0.37<br>(0.37, 0.37)    | 1.00<br>(1.00, 1.00)   |
| Chile  | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)   |
| Chile  | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)   |
| Chile  | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)   |

(continued)

| Group    | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR              |
|----------|-----------------------|---------|---------------------|-------------------------|----|----------------------|-------------------------|------------------------|
| Chile    | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05) | 0.46<br>(0.46, 0.46)    | 1.00<br>(1.00, 1.00)   |
| Chile    | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80) | 2.93<br>(2.93, 2.93)    | 1.00<br>(1.00, 1.00)   |
| Chile    | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15) | 1.13<br>(1.13, 1.13)    | 1.00<br>(1.00, 1.00)   |
| Columbia | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 64 | 0.05<br>(0.05, 0.05) | 1.12<br>(0.75, 1.67)    | 1.30<br>(1.13, 1.49)   |
| Columbia | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 64 | 0.80<br>(0.80, 0.80) | 12.70<br>(8.40, 19.20)  | 5.81<br>(4.14, 8.17)   |
| Columbia | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 64 | 0.15<br>(0.15, 0.15) | 8.16<br>(5.82, 11.45)   | 8.71<br>(6.18, 12.28)  |
| Columbia | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 20 | 0.05<br>(0.04, 0.05) | 2.61<br>(1.03, 6.62)    | 2.13<br>(1.17, 3.87)   |
| Columbia | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 20 | 0.80<br>(0.80, 0.80) | 31.48<br>(17.36, 57.08) | 12.05<br>(6.40, 22.66) |
| Columbia | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 20 | 0.15<br>(0.15, 0.15) | 12.55<br>(8.24, 19.12)  | 13.62<br>(8.94, 20.75) |
| Columbia | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 3  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)   |
| Columbia | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 3  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)   |
| Columbia | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 3  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)   |
| Columbia | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 13 | 0.05<br>(0.05, 0.05) | 0.61<br>(0.22, 1.71)    | 1.37<br>(0.88, 2.14)   |
| Columbia | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 13 | 0.80<br>(0.80, 0.80) | 9.19<br>(3.60, 23.44)   | 4.60<br>(2.17, 9.74)   |
| Columbia | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 13 | 0.15<br>(0.15, 0.15) | 4.78<br>(2.12, 10.76)   | 4.81<br>(2.10, 11.05)  |

(continued)

| Group  | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR              |
|--------|-----------------------|---------|---------------------|-------------------------|----|----------------------|-------------------------|------------------------|
| Mexico | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 9  | 0.05<br>(0.05, 0.05) | 0.74<br>(0.29, 1.90)    | 1.26<br>(0.89, 1.80)   |
| Mexico | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 9  | 0.80<br>(0.80, 0.80) | 16.10<br>(5.55, 46.75)  | 6.58<br>(2.32, 18.63)  |
| Mexico | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 9  | 0.15<br>(0.15, 0.15) | 11.26<br>(4.24, 29.93)  | 11.85<br>(4.35, 32.23) |
| Mexico | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 4  | 0.06<br>(0.04, 0.08) | 1.96<br>(0.42, 9.23)    | 1.84<br>(0.59, 5.74)   |
| Mexico | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 4  | 0.80<br>(0.80, 0.80) | 32.46<br>(7.08, 148.71) | 12.92<br>(2.82, 59.19) |
| Mexico | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 4  | 0.15<br>(0.15, 0.15) | 13.89<br>(3.79, 50.94)  | 15.07<br>(4.11, 55.28) |
| Mexico | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)   |
| Mexico | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)   |
| Mexico | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)   |
| Mexico | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 5  | 0.05<br>(0.05, 0.05) | 0.66<br>(0.25, 1.69)    | 1.00<br>(1.00, 1.00)   |
| Mexico | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 5  | 0.80<br>(0.80, 0.80) | 12.36<br>(7.69, 19.86)  | 4.92<br>(3.06, 7.91)   |
| Mexico | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5  | 0.15<br>(0.15, 0.15) | 6.18<br>(3.37, 11.36)   | 6.71<br>(3.65, 12.32)  |
| Peru   | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 19 | 0.05<br>(0.05, 0.05) | 2.12<br>(1.05, 4.28)    | 1.45<br>(1.09, 1.93)   |
| Peru   | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 19 | 0.80<br>(0.80, 0.80) | 22.76<br>(9.92, 52.21)  | 9.59<br>(4.44, 20.71)  |
| Peru   | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 19 | 0.15<br>(0.15, 0.15) | 13.64<br>(8.00, 23.25)  | 14.45<br>(8.22, 25.38) |

(continued)

| Group        | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC    | GMTR/GMCR               |
|--------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|--------------------------|-------------------------|
| Peru         | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 6   | 0.05<br>(0.05, 0.05) | 5.16<br>(2.20, 12.11)    | 2.30<br>(0.99, 5.37)    |
| Peru         | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 6   | 0.80<br>(0.80, 0.80) | 69.02<br>(32.43, 146.86) | 27.47<br>(12.91, 58.46) |
| Peru         | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 6   | 0.15<br>(0.15, 0.15) | 22.38<br>(12.79, 39.16)  | 24.29<br>(13.88, 42.50) |
| Peru         | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 1   | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)     | 1.00<br>(1.00, 1.00)    |
| Peru         | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 1   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)     | 1.00<br>(1.00, 1.00)    |
| Peru         | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 1   | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)     | 1.00<br>(1.00, 1.00)    |
| Peru         | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 5   | 0.05<br>(0.05, 0.05) | 1.54<br>(0.31, 7.56)     | 1.56<br>(0.82, 2.99)    |
| Peru         | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 5   | 0.80<br>(0.80, 0.80) | 7.47<br>(0.98, 56.72)    | 4.66<br>(1.05, 20.65)   |
| Peru         | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5   | 0.15<br>(0.15, 0.15) | 6.77<br>(1.68, 27.23)    | 6.33<br>(1.29, 30.93)   |
| South Africa | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 231 | 0.05<br>(0.05, 0.05) | 1.19<br>(0.95, 1.51)     | 1.52<br>(1.37, 1.69)    |
| South Africa | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 231 | 0.80<br>(0.80, 0.80) | 15.16<br>(12.68, 18.13)  | 6.13<br>(5.17, 7.27)    |
| South Africa | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 231 | 0.15<br>(0.15, 0.16) | 8.54<br>(7.24, 10.08)    | 8.96<br>(7.55, 10.64)   |
| South Africa | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 70  | 0.05<br>(0.05, 0.06) | 2.59<br>(1.62, 4.13)     | 2.22<br>(1.69, 2.92)    |
| South Africa | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 70  | 0.80<br>(0.80, 0.80) | 26.69<br>(18.00, 39.59)  | 10.84<br>(7.42, 15.85)  |
| South Africa | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 70  | 0.15<br>(0.15, 0.15) | 14.64<br>(10.61, 20.20)  | 16.39<br>(12.27, 21.88) |

(continued)

| Group        | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC  | GMTR/GMCR             |
|--------------|-----------------------|---------|---------------------|-------------------------|----|----------------------|------------------------|-----------------------|
| South Africa | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 27 | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)   | 1.00<br>(1.00, 1.00)  |
| South Africa | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 27 | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)   | 1.00<br>(1.00, 1.00)  |
| South Africa | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 27 | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)   | 1.00<br>(1.00, 1.00)  |
| South Africa | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 69 | 0.05<br>(0.05, 0.05) | 1.31<br>(0.84, 2.04)   | 1.48<br>(1.22, 1.79)  |
| South Africa | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 69 | 0.81<br>(0.78, 0.84) | 12.55<br>(8.32, 18.93) | 5.65<br>(3.97, 8.04)  |
| South Africa | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 69 | 0.15<br>(0.15, 0.16) | 6.61<br>(4.63, 9.43)   | 7.33<br>(5.22, 10.30) |

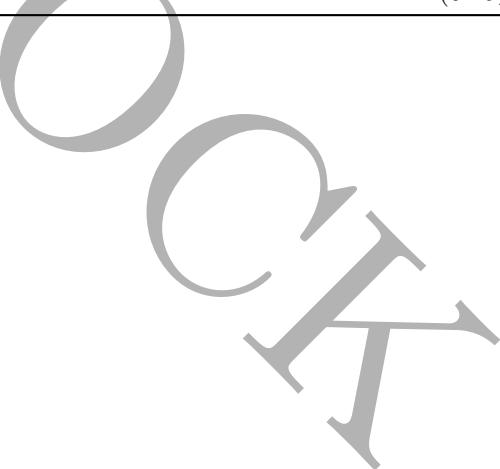
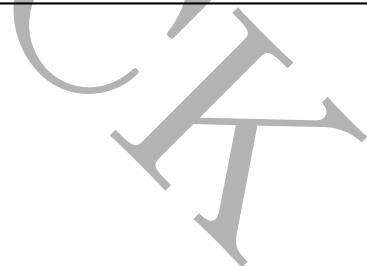


Table 8l. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by HIV Infection

| Group                | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N   | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|----------------------|-----------------------|---------|---------------------|-------------------------|-----|----------------------|-------------------------|-------------------------|
| <b>HIV Infection</b> |                       |         |                     |                         |     |                      |                         |                         |
| Negative             | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 848 | 0.05<br>(0.05, 0.05) | 1.43<br>(1.26, 1.63)    | 1.60<br>(1.50, 1.70)    |
| Negative             | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 848 | 0.80<br>(0.80, 0.80) | 17.56<br>(15.77, 19.55) | 7.31<br>(6.62, 8.07)    |
| Negative             | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 848 | 0.15<br>(0.15, 0.15) | 9.55<br>(8.65, 10.54)   | 10.37<br>(9.41, 11.44)  |
| Negative             | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 265 | 0.05<br>(0.05, 0.05) | 2.42<br>(1.90, 3.08)    | 2.00<br>(1.74, 2.29)    |
| Negative             | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 265 | 0.80<br>(0.79, 0.81) | 29.55<br>(24.46, 35.70) | 12.04<br>(10.06, 14.40) |
| Negative             | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 265 | 0.15<br>(0.15, 0.15) | 14.91<br>(12.69, 17.52) | 16.31<br>(13.93, 19.09) |
| Negative             | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 100 | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Negative             | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 100 | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Negative             | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 100 | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Negative             | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 266 | 0.05<br>(0.05, 0.05) | 0.87<br>(0.70, 1.10)    | 1.37<br>(1.27, 1.48)    |
| Negative             | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 266 | 0.80<br>(0.79, 0.80) | 9.49<br>(7.77, 11.60)   | 4.44<br>(3.77, 5.23)    |
| Negative             | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 266 | 0.15<br>(0.15, 0.15) | 5.12<br>(4.28, 6.12)    | 5.69<br>(4.81, 6.73)    |
| Positive             | D29 fold-rise over D1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 65  | 0.05<br>(0.05, 0.05) | 1.05<br>(0.66, 1.68)    | 1.46<br>(1.20, 1.78)    |
| Positive             | D29 fold-rise over D1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 65  | 0.80<br>(0.80, 0.80) | 11.52<br>(7.30, 18.16)  | 4.88<br>(3.24, 7.34)    |
| Positive             | D29 fold-rise over D1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 65  | 0.15<br>(0.15, 0.15) | 6.21<br>(4.22, 9.14)    | 6.60<br>(4.51, 9.67)    |

(continued)

| Group    | Visit                 | Arm     | Baseline SARS-CoV-2 | Marker                  | N  | Baseline GMT/GMC     | Post Baseline GMT/GMC   | GMTR/GMCR               |
|----------|-----------------------|---------|---------------------|-------------------------|----|----------------------|-------------------------|-------------------------|
| Positive | D29 fold-rise over D1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 18 | 0.06<br>(0.05, 0.07) | 4.99<br>(2.24, 11.13)   | 2.43<br>(1.17, 5.04)    |
| Positive | D29 fold-rise over D1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 18 | 0.80<br>(0.80, 0.80) | 39.49<br>(22.01, 70.85) | 15.72<br>(8.76, 28.20)  |
| Positive | D29 fold-rise over D1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 18 | 0.15<br>(0.15, 0.15) | 15.07<br>(9.94, 22.85)  | 16.07<br>(10.41, 24.78) |
| Positive | D29 fold-rise over D1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 9  | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00)    |
| Positive | D29 fold-rise over D1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 9  | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00)    |
| Positive | D29 fold-rise over D1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 9  | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00)    |
| Positive | D29 fold-rise over D1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 14 | 0.05<br>(0.05, 0.05) | 0.83<br>(0.17, 4.12)    | 1.60<br>(0.74, 3.49)    |
| Positive | D29 fold-rise over D1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 14 | 0.80<br>(0.80, 0.80) | 10.02<br>(3.90, 25.74)  | 4.10<br>(1.61, 10.43)   |
| Positive | D29 fold-rise over D1 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 14 | 0.15<br>(0.15, 0.15) | 3.18<br>(1.04, 9.69)    | 3.86<br>(1.36, 10.94)   |



## 1.9 The ratios of GMTs/GMCs between groups

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

| Group 1 vs 2            | Visit | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC      | Group 2 GMT/GMC      | Ratios of GMT/GMC    |
|-------------------------|-------|---------|---------------------|-------------------------|----------------------|----------------------|----------------------|
| <b>Age</b>              |       |         |                     |                         |                      |                      |                      |
| Age ≥ 60 vs Age 18 - 59 | Day 1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.00<br>(1.00, 1.00) |
| Age ≥ 60 vs Age 18 - 59 | Day 1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80) | 1.00<br>(1.00, 1.00) |
| Age ≥ 60 vs Age 18 - 59 | Day 1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(1.00, 1.00) |
| Age ≥ 60 vs Age 18 - 59 | Day 1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 0.98<br>(0.94, 1.03) |
| Age ≥ 60 vs Age 18 - 59 | Day 1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 0.81<br>(0.78, 0.84) | 0.80<br>(0.80, 0.80) | 1.02<br>(0.98, 1.05) |
| Age ≥ 60 vs Age 18 - 59 | Day 1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(1.00, 1.00) |
| Age ≥ 60 vs Age 18 - 59 | Day 1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.00<br>(1.00, 1.00) |
| Age ≥ 60 vs Age 18 - 59 | Day 1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80) | 1.00<br>(1.00, 1.00) |
| Age ≥ 60 vs Age 18 - 59 | Day 1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(1.00, 1.00) |
| Age ≥ 60 vs Age 18 - 59 | Day 1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.01<br>(0.95, 1.06) |

(continued)

| Group 1 vs 2            | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC         | Group 2 GMT/GMC         | Ratios of GMT/GMC    |
|-------------------------|--------|---------|---------------------|-------------------------|-------------------------|-------------------------|----------------------|
| Age ≥ 60 vs Age 18 - 59 | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.79, 0.81)    | 1.00<br>(0.99, 1.00) |
| Age ≥ 60 vs Age 18 - 59 | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.01) |
| Age ≥ 60 vs Age 18 - 59 | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 2.98<br>(2.49, 3.57)    | 0.94<br>(0.80, 1.11)    | 3.16<br>(2.48, 4.02) |
| Age ≥ 60 vs Age 18 - 59 | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 40.62<br>(35.11, 47.01) | 10.80<br>(9.40, 12.41)  | 3.76<br>(3.07, 4.60) |
| Age ≥ 60 vs Age 18 - 59 | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 20.78<br>(18.47, 23.38) | 6.06<br>(5.32, 6.91)    | 3.43<br>(2.88, 4.09) |
| Age ≥ 60 vs Age 18 - 59 | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 5.00<br>(3.66, 6.83)    | 1.76<br>(1.29, 2.41)    | 2.83<br>(1.82, 4.41) |
| Age ≥ 60 vs Age 18 - 59 | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 63.07<br>(48.83, 81.48) | 20.39<br>(16.05, 25.89) | 3.09<br>(2.18, 4.39) |
| Age ≥ 60 vs Age 18 - 59 | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 29.97<br>(23.96, 37.48) | 10.36<br>(8.49, 12.65)  | 2.89<br>(2.14, 3.90) |
| Age ≥ 60 vs Age 18 - 59 | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| Age ≥ 60 vs Age 18 - 59 | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| Age ≥ 60 vs Age 18 - 59 | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Age ≥ 60 vs Age 18 - 59 | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 2.46<br>(1.77, 3.42)    | 0.52<br>(0.39, 0.69)    | 4.76<br>(3.08, 7.38) |

(continued)

| Group 1 vs 2                 | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC         | Group 2 GMT/GMC      | Ratios of GMT/GMC    |
|------------------------------|--------|---------|---------------------|-------------------------|-------------------------|----------------------|----------------------|
| Age $\geq$ 60 vs Age 18 - 59 | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 28.45<br>(21.21, 38.17) | 5.48<br>(4.31, 6.98) | 5.19<br>(3.55, 7.59) |
| Age $\geq$ 60 vs Age 18 - 59 | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 15.36<br>(12.18, 19.37) | 2.84<br>(2.26, 3.57) | 5.40<br>(3.90, 7.48) |

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    |
|---------------------------------|--------|---------|---------------------|-------------------------|-------------------------|-------------------------|----------------------|
| <b>Risk for Severe Covid-19</b> |        |         |                     |                         |                         |                         |                      |
| At-risk vs Not at-risk          | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| At-risk vs Not at-risk          | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| At-risk vs Not at-risk          | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| At-risk vs Not at-risk          | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.06<br>(1.00, 1.13) |
| At-risk vs Not at-risk          | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.79, 0.82)    | 0.99<br>(0.97, 1.01) |
| At-risk vs Not at-risk          | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| At-risk vs Not at-risk          | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| At-risk vs Not at-risk          | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| At-risk vs Not at-risk          | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| At-risk vs Not at-risk          | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 0.99<br>(0.94, 1.05) |
| At-risk vs Not at-risk          | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.79, 0.81)    | 1.00<br>(0.99, 1.00) |
| At-risk vs Not at-risk          | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| At-risk vs Not at-risk          | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 1.34<br>(1.12, 1.59)    | 1.45<br>(1.23, 1.72)    | 0.92<br>(0.72, 1.17) |
| At-risk vs Not at-risk          | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 17.44<br>(15.14, 20.09) | 16.85<br>(14.56, 19.50) | 1.03<br>(0.84, 1.27) |
| At-risk vs Not at-risk          | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 9.51<br>(8.27, 10.93)   | 9.14<br>(8.03, 10.39)   | 1.04<br>(0.86, 1.26) |

(continued)

| Group 1 vs 2           | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC         | Group 2 GMT/GMC         | Ratios of GMT/GMC    |
|------------------------|--------|---------|---------------------|-------------------------|-------------------------|-------------------------|----------------------|
| At-risk vs Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 2.53<br>(1.88, 3.39)    | 2.52<br>(1.80, 3.53)    | 1.00<br>(0.64, 1.57) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 34.36<br>(27.39, 43.11) | 27.41<br>(21.07, 35.65) | 1.25<br>(0.89, 1.77) |
| At-risk vs Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 15.52<br>(12.72, 18.95) | 14.52<br>(11.67, 18.08) | 1.07<br>(0.79, 1.44) |
| At-risk vs Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| At-risk vs Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| At-risk vs Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| At-risk vs Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 1.16<br>(0.86, 1.56)    | 0.72<br>(0.52, 0.98)    | 1.61<br>(1.05, 2.49) |
| At-risk vs Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 12.07<br>(9.52, 15.31)  | 8.11<br>(6.15, 10.70)   | 1.49<br>(1.03, 2.14) |
| At-risk vs Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 6.30<br>(5.07, 7.82)    | 4.29<br>(3.33, 5.51)    | 1.47<br>(1.05, 2.05) |

Table 9c. The ratios of GMTs/GMCs between groups by Age 18 - 59, 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    |
|--|-------|---------|---------------------|-------------------------|----------------------|----------------------|----------------------|
| <b>Age 18 - 59, Risk for Severe Covid-19</b>   |       |         |                     |                         |                      |                      |                      |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80) | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.06) | 0.05<br>(0.05, 0.05) | 1.07<br>(0.98, 1.16) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80) | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80) | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 0.96<br>(0.89, 1.03) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.79, 0.81) | 0.99<br>(0.98, 1.01) |

(continued)

| Group 1 vs 2                                   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC         | Group 2 GMT/GMC         | Ratios of GMT/GMC    |
|--|--------|---------|---------------------|-------------------------|-------------------------|-------------------------|----------------------|
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 0.88<br>(0.70, 1.11)    | 0.99<br>(0.79, 1.23)    | 0.89<br>(0.65, 1.23) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 11.21<br>(9.32, 13.48)  | 10.54<br>(8.66, 12.82)  | 1.06<br>(0.81, 1.39) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 6.37<br>(5.24, 7.73)    | 5.86<br>(4.92, 6.99)    | 1.09<br>(0.84, 1.41) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1.80<br>(1.22, 2.64)    | 1.74<br>(1.10, 2.75)    | 1.03<br>(0.57, 1.88) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 24.92<br>(18.62, 33.36) | 17.82<br>(12.58, 25.23) | 1.40<br>(0.89, 2.20) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 10.40<br>(7.91, 13.67)  | 10.34<br>(7.83, 13.65)  | 1.01<br>(0.68, 1.49) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.66<br>(0.45, 0.98)    | 0.44<br>(0.29, 0.65)    | 1.52<br>(0.87, 2.67) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 7.06<br>(5.28, 9.43)    | 4.62<br>(3.24, 6.58)    | 1.53<br>(0.97, 2.42) |

(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 18 - 59 At-risk vs<br>Age 18 - 59 Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 3.41<br>(2.58, 4.52) | 2.51<br>(1.80, 3.50) | 1.36<br>(0.88, 2.10) |

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Table 9d. The ratios of GMTs/GMCs between groups by Age  $\geq 60$ , 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    |
|---|-------|---------|---------------------|-------------------------|----------------------|----------------------|----------------------|
| <b>Age <math>\geq 60</math>, Risk for Severe Covid-19</b> |       |         |                     |                         |                      |                      |                      |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Day 1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.00<br>(1.00, 1.00) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Day 1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80) | 1.00<br>(1.00, 1.00) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Day 1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(0.99, 1.00) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Day 1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.06<br>(0.98, 1.14) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Day 1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.82<br>(0.78, 0.87) | 0.97<br>(0.92, 1.03) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Day 1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(1.00, 1.00) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Day 1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.00<br>(1.00, 1.00) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Day 1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80) | 1.00<br>(1.00, 1.00) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Day 1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(1.00, 1.00) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Day 1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.06) | 0.05<br>(0.05, 0.05) | 1.07<br>(0.98, 1.17) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Day 1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80) | 1.00<br>(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 $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.16)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.01) |
| Age $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 2.93<br>(2.27, 3.79)    | 3.02<br>(2.36, 3.86)    | 0.97<br>(0.68, 1.39) |
| Age $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 40.07<br>(32.47, 49.44) | 41.01<br>(33.61, 50.04) | 0.98<br>(0.73, 1.31) |
| Age $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 20.22<br>(17.20, 23.77) | 21.17<br>(17.96, 24.94) | 0.96<br>(0.76, 1.20) |
| Age $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 4.73<br>(3.07, 7.28)    | 5.21<br>(3.36, 8.07)    | 0.91<br>(0.49, 1.68) |
| Age $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 62.08<br>(43.89, 87.80) | 63.79<br>(44.40, 91.66) | 0.97<br>(0.59, 1.61) |
| Age $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 32.45<br>(25.59, 41.17) | 28.30<br>(20.07, 39.92) | 1.15<br>(0.75, 1.74) |
| Age $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| Age $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| Age $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Age $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 3.60<br>(2.43, 5.33)    | 1.91<br>(1.19, 3.09)    | 1.88<br>(1.01, 3.49) |
| Age $\geq$ 60 At-risk vs Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 35.83<br>(24.46, 52.47) | 24.45<br>(16.12, 37.10) | 1.47<br>(0.83, 2.58) |

(continued)

| Group 1 vs 2  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC         | Group 2 GMT/GMC        | Ratios of GMT/GMC    |
|---|--------|---------|---------------------|-------------------------|-------------------------|------------------------|----------------------|
| Age $\geq$ 60 At-risk vs<br>Age $\geq$ 60 Not at-risk | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 21.81<br>(16.61, 28.64) | 12.20<br>(8.69, 17.11) | 1.79<br>(1.16, 2.76) |
|   |        |         |                     |                         |                         |                        |                      |

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    |
|----------------|--------|---------|---------------------|-------------------------|-------------------------|-------------------------|----------------------|
| <b>Sex</b>     |        |         |                     |                         |                         |                         |                      |
| Male vs Female | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| Male vs Female | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| Male vs Female | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Male vs Female | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.07<br>(1.01, 1.14) |
| Male vs Female | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.79, 0.82)    | 0.99<br>(0.97, 1.01) |
| Male vs Female | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Male vs Female | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| Male vs Female | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| Male vs Female | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Male vs Female | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 0.99<br>(0.94, 1.05) |
| Male vs Female | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.79, 0.81)    | 0.80<br>(0.80, 0.80)    | 1.01<br>(0.99, 1.02) |
| Male vs Female | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Male vs Female | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 1.43<br>(1.19, 1.72)    | 1.38<br>(1.17, 1.64)    | 1.03<br>(0.80, 1.33) |
| Male vs Female | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 17.21<br>(14.63, 20.24) | 16.98<br>(14.69, 19.63) | 1.01<br>(0.81, 1.27) |
| Male vs Female | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 9.36<br>(8.08, 10.84)   | 9.22<br>(8.06, 10.54)   | 1.02<br>(0.83, 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    |
|----------------|--------|---------|---------------------|-------------------------|-------------------------|-------------------------|----------------------|
| Male vs Female | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 2.88<br>(1.96, 4.24)    | 2.30<br>(1.70, 3.09)    | 1.25<br>(0.76, 2.06) |
| Male vs Female | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 31.72<br>(23.68, 42.49) | 28.91<br>(22.56, 37.04) | 1.10<br>(0.74, 1.63) |
| Male vs Female | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 16.03<br>(12.43, 20.69) | 14.17<br>(11.60, 17.32) | 1.13<br>(0.81, 1.58) |
| Male vs Female | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| Male vs Female | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| Male vs Female | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Male vs Female | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.88<br>(0.61, 1.27)    | 0.87<br>(0.63, 1.18)    | 1.01<br>(0.61, 1.69) |
| Male vs Female | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 9.77<br>(7.11, 13.44)   | 9.31<br>(7.08, 12.24)   | 1.05<br>(0.67, 1.65) |
| Male vs Female | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5.33<br>(4.08, 6.96)    | 4.75<br>(3.65, 6.18)    | 1.12<br>(0.75, 1.68) |

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    |
|--|-------|---------|---------------------|-------------------------|----------------------|----------------------|----------------------|
| <b>Hispanic or Latino ethnicity</b>          |       |         |                     |                         |                      |                      |                      |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.00<br>(1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80) | 1.00<br>(1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.01<br>(0.96, 1.07) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.81<br>(0.79, 0.83) | 0.99<br>(0.97, 1.01) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.00<br>(1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.80, 0.80) | 1.00<br>(1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15) | 0.15<br>(0.15, 0.15) | 1.00<br>(1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05) | 0.05<br>(0.05, 0.05) | 1.02<br>(0.96, 1.08) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 1 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80) | 0.80<br>(0.79, 0.81) | 0.99<br>(0.98, 1.01) |

(continued)

| Group 1 vs 2                                 | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC         | Group 2 GMT/GMC         | Ratios of GMT/GMC    |
|--|--------|---------|---------------------|-------------------------|-------------------------|-------------------------|----------------------|
| Hispanic or Latino vs Not Hispanic or Latino | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 1.48<br>(1.24, 1.77)    | 1.37<br>(1.16, 1.63)    | 1.08<br>(0.84, 1.38) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 17.87<br>(15.17, 21.05) | 16.37<br>(14.27, 18.78) | 1.09<br>(0.88, 1.35) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 9.55<br>(8.26, 11.04)   | 9.23<br>(8.11, 10.50)   | 1.03<br>(0.85, 1.26) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 2.07<br>(1.41, 3.02)    | 3.09<br>(2.24, 4.24)    | 0.67<br>(0.41, 1.10) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 26.47<br>(19.85, 35.29) | 36.03<br>(27.77, 46.75) | 0.73<br>(0.49, 1.09) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 14.30<br>(11.44, 17.89) | 15.94<br>(12.70, 20.00) | 0.90<br>(0.65, 1.24) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.81<br>(0.57, 1.15)    | 1.06<br>(0.74, 1.51)    | 0.77<br>(0.46, 1.28) |
| Hispanic or Latino vs Not Hispanic or Latino | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 9.25<br>(6.85, 12.50)   | 10.83<br>(8.01, 14.64)  | 0.85<br>(0.55, 1.33) |

(continued)

| Group 1 vs 2                                    | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC      | Group 2 GMT/GMC      | Ratios of GMT/GMC    |
|---|--------|---------|---------------------|-------------------------|----------------------|----------------------|----------------------|
| Hispanic or Latino vs<br>Not Hispanic or Latino | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 5.02<br>(3.84, 6.56) | 5.11<br>(3.81, 6.86) | 0.98<br>(0.65, 1.49) |

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Table 9g. The ratios of GMTs/GMCs between groups by Underrepresented Minority Status in the U.S.

| Group 1 vs 2  | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC         | Group 2 GMT/GMC         | Ratios of GMT/GMC    |
|---|--------|---------|---------------------|-------------------------|-------------------------|-------------------------|----------------------|
| <b>Underrepresented Minority Status in the U.S.</b> |        |         |                     |                         |                         |                         |                      |
| URM vs Non-URM                                      | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM                                      | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM                                      | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM                                      | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 0.99<br>(0.94, 1.04) |
| URM vs Non-URM                                      | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.82<br>(0.78, 0.85)    | 0.98<br>(0.93, 1.02) |
| URM vs Non-URM                                      | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM                                      | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM                                      | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM                                      | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM                                      | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.06)    | 0.05<br>(0.05, 0.05)    | 1.02<br>(0.91, 1.14) |
| URM vs Non-URM                                      | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM                                      | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM                                      | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 1.33<br>(1.07, 1.66)    | 1.36<br>(1.05, 1.77)    | 0.98<br>(0.69, 1.38) |
| URM vs Non-URM                                      | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 15.83<br>(13.04, 19.22) | 16.64<br>(13.58, 20.37) | 0.95<br>(0.72, 1.26) |
| URM vs Non-URM                                      | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 9.26<br>(7.76, 11.04)   | 8.85<br>(7.31, 10.73)   | 1.05<br>(0.81, 1.36) |

(continued)

| Group 1 vs 2   | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC         | Group 2 GMT/GMC         | Ratios of GMT/GMC    |
|----------------|--------|---------|---------------------|-------------------------|-------------------------|-------------------------|----------------------|
| URM vs Non-URM | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 1.60<br>(1.06, 2.41)    | 3.92<br>(2.47, 6.21)    | 0.41<br>(0.22, 0.76) |
| URM vs Non-URM | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 17.64<br>(12.36, 25.18) | 47.58<br>(34.24, 66.13) | 0.37<br>(0.23, 0.60) |
| URM vs Non-URM | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 12.18<br>(9.07, 16.36)  | 17.81<br>(13.03, 24.36) | 0.68<br>(0.44, 1.05) |
| URM vs Non-URM | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| URM vs Non-URM | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.93<br>(0.65, 1.32)    | 1.05<br>(0.65, 1.70)    | 0.89<br>(0.49, 1.61) |
| URM vs Non-URM | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 10.38<br>(7.41, 14.55)  | 10.56<br>(7.07, 15.79)  | 0.98<br>(0.58, 1.66) |
| URM vs Non-URM | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 4.59<br>(3.28, 6.41)    | 5.08<br>(3.67, 7.03)    | 0.90<br>(0.57, 1.44) |

Table 9h. The ratios of GMTs/GMCs between groups by HIV Infection

| Group 1 vs 2         | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC        | Group 2 GMT/GMC         | Ratios of GMT/GMC    |
|----------------------|--------|---------|---------------------|-------------------------|------------------------|-------------------------|----------------------|
| <b>HIV Infection</b> |        |         |                     |                         |                        |                         |                      |
| Positive vs Negative | Day 1  | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)   | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| Positive vs Negative | Day 1  | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)   | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| Positive vs Negative | Day 1  | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)   | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Positive vs Negative | Day 1  | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 0.06<br>(0.05, 0.07)   | 0.05<br>(0.05, 0.05)    | 1.14<br>(0.94, 1.38) |
| Positive vs Negative | Day 1  | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)   | 0.80<br>(0.79, 0.81)    | 0.99<br>(0.98, 1.01) |
| Positive vs Negative | Day 1  | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)   | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Positive vs Negative | Day 1  | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)   | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| Positive vs Negative | Day 1  | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)   | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| Positive vs Negative | Day 1  | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)   | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Positive vs Negative | Day 1  | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)   | 0.05<br>(0.05, 0.05)    | 0.96<br>(0.93, 0.99) |
| Positive vs Negative | Day 1  | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)   | 0.80<br>(0.79, 0.80)    | 1.00<br>(0.99, 1.00) |
| Positive vs Negative | Day 1  | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)   | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Positive vs Negative | Day 29 | Vaccine | Negative            | Anti N IgG (BAU/ml)     | 1.05<br>(0.66, 1.68)   | 1.43<br>(1.26, 1.63)    | 0.73<br>(0.45, 1.20) |
| Positive vs Negative | Day 29 | Vaccine | Negative            | Anti RBD IgG (BAU/ml)   | 11.52<br>(7.30, 18.16) | 17.56<br>(15.77, 19.55) | 0.66<br>(0.41, 1.05) |
| Positive vs Negative | Day 29 | Vaccine | Negative            | Anti Spike IgG (BAU/ml) | 6.21<br>(4.22, 9.14)   | 9.55<br>(8.65, 10.54)   | 0.65<br>(0.43, 0.97) |

(continued)

| Group 1 vs 2         | Visit  | Arm     | Baseline SARS-CoV-2 | Marker                  | Group 1 GMT/GMC         | Group 2 GMT/GMC         | Ratios of GMT/GMC    |
|----------------------|--------|---------|---------------------|-------------------------|-------------------------|-------------------------|----------------------|
| Positive vs Negative | Day 29 | Vaccine | Positive            | Anti N IgG (BAU/ml)     | 4.99<br>(2.24, 11.13)   | 2.42<br>(1.90, 3.08)    | 2.06<br>(0.90, 4.75) |
| Positive vs Negative | Day 29 | Vaccine | Positive            | Anti RBD IgG (BAU/ml)   | 39.49<br>(22.01, 70.85) | 29.55<br>(24.46, 35.70) | 1.34<br>(0.72, 2.48) |
| Positive vs Negative | Day 29 | Vaccine | Positive            | Anti Spike IgG (BAU/ml) | 15.07<br>(9.94, 22.85)  | 14.91<br>(12.69, 17.52) | 1.01<br>(0.65, 1.58) |
| Positive vs Negative | Day 29 | Placebo | Negative            | Anti N IgG (BAU/ml)     | 0.05<br>(0.05, 0.05)    | 0.05<br>(0.05, 0.05)    | 1.00<br>(1.00, 1.00) |
| Positive vs Negative | Day 29 | Placebo | Negative            | Anti RBD IgG (BAU/ml)   | 0.80<br>(0.80, 0.80)    | 0.80<br>(0.80, 0.80)    | 1.00<br>(1.00, 1.00) |
| Positive vs Negative | Day 29 | Placebo | Negative            | Anti Spike IgG (BAU/ml) | 0.15<br>(0.15, 0.15)    | 0.15<br>(0.15, 0.15)    | 1.00<br>(1.00, 1.00) |
| Positive vs Negative | Day 29 | Placebo | Positive            | Anti N IgG (BAU/ml)     | 0.83<br>(0.17, 4.12)    | 0.87<br>(0.70, 1.10)    | 0.95<br>(0.18, 4.88) |
| Positive vs Negative | Day 29 | Placebo | Positive            | Anti RBD IgG (BAU/ml)   | 10.02<br>(3.90, 25.74)  | 9.49<br>(7.77, 11.60)   | 1.06<br>(0.39, 2.83) |
| Positive vs Negative | Day 29 | Placebo | Positive            | Anti Spike IgG (BAU/ml) | 3.18<br>(1.04, 9.69)    | 5.12<br>(4.28, 6.12)    | 0.62<br>(0.20, 1.96) |

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

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

| Comparison         | Baseline SARS-CoV-2 | Arm | Visit  | Marker                  | Responder            | % 2-Fold Rise        | % 4-Fold Rise        |
|--------------------|---------------------|-----|--------|-------------------------|----------------------|----------------------|----------------------|
| <b>Arm</b>         |                     |     |        |                         |                      |                      |                      |
| Vaccine vs Placebo | Negative            | -   | Day 29 | Anti N IgG (BAU/ml)     | 0.06<br>(0.05, 0.08) | 0.25<br>(0.23, 0.29) | 0.16<br>(0.13, 0.18) |
| Vaccine vs Placebo | Negative            | -   | Day 29 | Anti RBD IgG (BAU/ml)   | 0.54<br>(0.51, 0.58) | 0.79<br>(0.76, 0.82) | 0.62<br>(0.58, 0.66) |
| Vaccine vs Placebo | Negative            | -   | Day 29 | Anti Spike IgG (BAU/ml) | 0.48<br>(0.44, 0.51) | 0.86<br>(0.83, 0.88) | 0.75<br>(0.72, 0.78) |
| Vaccine vs Placebo | Positive            | -   | Day 29 | Anti N IgG (BAU/ml)     | 0.07<br>(0.03, 0.12) | 0.15<br>(0.07, 0.23) | 0.13<br>(0.07, 0.19) |
| Vaccine vs Placebo | Positive            | -   | Day 29 | Anti RBD IgG (BAU/ml)   | 0.37<br>(0.28, 0.45) | 0.23<br>(0.15, 0.31) | 0.31<br>(0.22, 0.39) |
| Vaccine vs Placebo | Positive            | -   | Day 29 | Anti Spike IgG (BAU/ml) | 0.3<br>(0.21, 0.38)  | 0.23<br>(0.16, 0.3)  | 0.29<br>(0.21, 0.37) |

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        |
|----------------------------|---------------------|---------|--------|-------------------------|----------------------|----------------------|----------------------|
| <b>Baseline SARS-CoV-2</b> |                     |         |        |                         |                      |                      |                      |
| Positive vs Negative       | -                   | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | 0.05<br>(0.01, 0.09) | 0.1<br>(0.03, 0.17)  | 0.08<br>(0.02, 0.14) |
| Positive vs Negative       | -                   | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0.03<br>(0.02, 0.06) | 0.2<br>(0.16, 0.25)  | 0.1<br>(0.07, 0.14)  |
| Positive vs Negative       | -                   | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | 0.2<br>(0.13, 0.27)  | 0.1<br>(0.04, 0.15)  | 0.18<br>(0.11, 0.24) |
| Positive vs Negative       | -                   | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0.38<br>(0.32, 0.44) | 0.66<br>(0.59, 0.72) | 0.5<br>(0.43, 0.56)  |
| Positive vs Negative       | -                   | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.15<br>(0.07, 0.22) | 0.09<br>(0.05, 0.13) | 0.12<br>(0.06, 0.18) |
| Positive vs Negative       | -                   | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0.32<br>(0.27, 0.38) | 0.72<br>(0.65, 0.78) | 0.58<br>(0.52, 0.65) |

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        |
|-------------------------|---------------------|---------|--------|-------------------------|----------------------|-----------------------|----------------------|
| <b>Age</b>              |                     |         |        |                         |                      |                       |                      |
| Age ≥ 60 vs Age 18 - 59 | Negative            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | 0.1<br>(0.07, 0.14)  | 0.22<br>(0.15, 0.28)  | 0.19<br>(0.13, 0.24) |
| Age ≥ 60 vs Age 18 - 59 | Negative            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(0, 0)          | 0<br>(0, 0)           | 0<br>(0, 0)          |
| Age ≥ 60 vs Age 18 - 59 | Negative            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | 0.34<br>(0.27, 0.4)  | 0.2<br>(0.15, 0.25)   | 0.34<br>(0.27, 0.4)  |
| Age ≥ 60 vs Age 18 - 59 | Negative            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0<br>(0, 0)          | 0<br>(0, 0)           | 0<br>(0, 0)          |
| Age ≥ 60 vs Age 18 - 59 | Negative            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.36<br>(0.29, 0.42) | 0.18<br>(0.14, 0.23)  | 0.28<br>(0.23, 0.33) |
| Age ≥ 60 vs Age 18 - 59 | Negative            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0<br>(0, 0)          | 0<br>(0, 0)           | 0<br>(0, 0)          |
| Age ≥ 60 vs Age 18 - 59 | Positive            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | 0.13<br>(0.05, 0.22) | 0.24<br>(0.11, 0.35)  | 0.18<br>(0.07, 0.29) |
| Age ≥ 60 vs Age 18 - 59 | Positive            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0.05<br>(0, 0.11)    | 0.31<br>(0.2, 0.41)   | 0.2<br>(0.12, 0.29)  |
| Age ≥ 60 vs Age 18 - 59 | Positive            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | 0.22<br>(0.12, 0.32) | 0.1<br>(0.02, 0.18)   | 0.16<br>(0.07, 0.25) |
| Age ≥ 60 vs Age 18 - 59 | Positive            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0.42<br>(0.29, 0.53) | 0.33<br>(0.21, 0.44)  | 0.4<br>(0.27, 0.51)  |
| Age ≥ 60 vs Age 18 - 59 | Positive            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.31<br>(0.19, 0.41) | 0.05<br>(-0.03, 0.11) | 0.12<br>(0.04, 0.21) |

(continued)

| Comparison                      | Baseline SARS-CoV-2 | Arm     | Visit  | Marker                  | Responder            | % 2-Fold Rise      | % 4-Fold Rise        |
|---------------------------------|---------------------|---------|--------|-------------------------|----------------------|--------------------|----------------------|
| Age $\geq$ 60 vs Age 18 -<br>59 | Positive            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0.43<br>(0.31, 0.54) | 0.3<br>(0.19, 0.4) | 0.44<br>(0.31, 0.54) |

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          |
|---------------------------------|---------------------|---------|--------|-------------------------|------------------------|------------------------|------------------------|
| <b>Risk for Severe Covid-19</b> |                     |         |        |                         |                        |                        |                        |
| At-risk vs Not at-risk          | Negative            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | 0.03<br>(0, 0.06)      | -0.03<br>(-0.09, 0.03) | 0.01<br>(-0.04, 0.06)  |
| At-risk vs Not at-risk          | Negative            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)            |
| At-risk vs Not at-risk          | Negative            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | -0.04<br>(-0.11, 0.03) | 0.03<br>(-0.03, 0.09)  | 0.02<br>(-0.05, 0.09)  |
| At-risk vs Not at-risk          | Negative            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)            |
| At-risk vs Not at-risk          | Negative            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.03<br>(-0.04, 0.1)   | 0<br>(-0.06, 0.05)     | 0<br>(-0.07, 0.06)     |
| At-risk vs Not at-risk          | Negative            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)            |
| At-risk vs Not at-risk          | Positive            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | -0.01<br>(-0.09, 0.07) | -0.03<br>(-0.15, 0.08) | -0.04<br>(-0.14, 0.06) |
| At-risk vs Not at-risk          | Positive            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(-0.05, 0.04)     | 0.1<br>(0.01, 0.19)    | 0.04<br>(-0.03, 0.1)   |
| At-risk vs Not at-risk          | Positive            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | 0<br>(-0.12, 0.11)     | 0.05<br>(-0.03, 0.14)  | 0<br>(-0.11, 0.1)      |
| At-risk vs Not at-risk          | Positive            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0.01<br>(-0.1, 0.13)   | 0.1<br>(-0.03, 0.22)   | 0.09<br>(-0.04, 0.21)  |
| At-risk vs Not at-risk          | Positive            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.05<br>(-0.08, 0.17)  | 0<br>(-0.07, 0.06)     | 0.04<br>(-0.05, 0.14)  |
| At-risk vs Not at-risk          | Positive            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0.09<br>(-0.02, 0.2)   | 0.16<br>(0.03, 0.27)   | 0.1<br>(-0.03, 0.23)   |

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 18 - 59, Risk for Severe Covid-19

| Comparison                                     | Baseline SARS-CoV-2 | Arm     | Visit  | Marker                  | Responder              | % 2-Fold Rise          | % 4-Fold Rise          |
|--|---------------------|---------|--------|-------------------------|------------------------|------------------------|------------------------|
| <b>Age 18 - 59, Risk for Severe Covid-19</b>   |                     |         |        |                         |                        |                        |                        |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Negative            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | 0.03<br>(0, 0.07)      | -0.03<br>(-0.1, 0.05)  | 0.02<br>(-0.03, 0.08)  |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Negative            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)            |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Negative            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | -0.04<br>(-0.14, 0.06) | 0.05<br>(-0.03, 0.14)  | 0.02<br>(-0.08, 0.12)  |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Negative            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)            |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Negative            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.05<br>(-0.04, 0.15)  | 0<br>(-0.08, 0.08)     | 0<br>(-0.09, 0.1)      |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Negative            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)            |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Positive            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | -0.03<br>(-0.13, 0.08) | -0.04<br>(-0.2, 0.11)  | -0.06<br>(-0.19, 0.07) |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Positive            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | -0.01<br>(-0.08, 0.04) | 0.08<br>(-0.02, 0.2)   | 0.01<br>(-0.06, 0.08)  |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Positive            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | 0<br>(-0.16, 0.17)     | 0.08<br>(-0.04, 0.2)   | 0<br>(-0.15, 0.15)     |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Positive            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | -0.04<br>(-0.19, 0.12) | 0.14<br>(-0.05, 0.31)  | 0.08<br>(-0.1, 0.25)   |
| Age 18 - 59 At-risk vs Age 18 - 59 Not at-risk | Positive            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.04<br>(-0.13, 0.22)  | -0.01<br>(-0.11, 0.08) | 0.03<br>(-0.1, 0.17)   |

(continued)

| Comparison  | Baseline SARS-CoV-2 | Arm     | Visit  | Marker                  | Responder             | % 2-Fold Rise     | % 4-Fold Rise        |
|---|---------------------|---------|--------|-------------------------|-----------------------|-------------------|----------------------|
| Age 18 - 59 At-risk vs<br>Age 18 - 59 Not at-risk | Positive            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0.01<br>(-0.12, 0.16) | 0.18<br>(0, 0.35) | 0.09<br>(-0.1, 0.26) |
|   |                     |         |        |                         |                       |                   |                      |

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  $\geq 60$ , Risk for Severe Covid-19

| Comparison  | Baseline SARS-CoV-2 | Arm     | Visit  | Marker                  | Responder              | % 2-Fold Rise          | % 4-Fold Rise          |
|---|---------------------|---------|--------|-------------------------|------------------------|------------------------|------------------------|
| <b>Age <math>\geq 60</math>, Risk for Severe Covid-19</b> |                     |         |        |                         |                        |                        |                        |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Negative            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | 0.03<br>(-0.03, 0.1)   | -0.03<br>(-0.13, 0.06) | -0.01<br>(-0.1, 0.08)  |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Negative            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)            |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Negative            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | -0.03<br>(-0.11, 0.05) | 0<br>(-0.06, 0.05)     | 0.01<br>(-0.06, 0.08)  |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Negative            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)            |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Negative            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | -0.03<br>(-0.12, 0.06) | 0<br>(-0.04, 0.02)     | -0.01<br>(-0.06, 0.04) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Negative            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)            |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Positive            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | 0.01<br>(-0.14, 0.16)  | -0.03<br>(-0.21, 0.15) | -0.01<br>(-0.18, 0.16) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Positive            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0.02<br>(-0.1, 0.12)   | 0.14<br>(-0.04, 0.32)  | 0.1<br>(-0.07, 0.26)   |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Positive            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | -0.02<br>(-0.15, 0.09) | 0<br>(-0.11, 0.09)     | -0.01<br>(-0.14, 0.09) |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Positive            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0.14<br>(-0.05, 0.31)  | 0.02<br>(-0.11, 0.16)  | 0.12<br>(-0.05, 0.28)  |
| Age $\geq 60$ At-risk vs Age $\geq 60$ Not at-risk        | Positive            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.04<br>(-0.09, 0.18)  | 0.02<br>(0, 0.15)      | 0.05<br>(-0.03, 0.15)  |

(continued)

| Comparison  | Baseline SARS-CoV-2 | Arm     | Visit  | Marker                  | Responder            | % 2-Fold Rise        | % 4-Fold Rise        |
|---|---------------------|---------|--------|-------------------------|----------------------|----------------------|----------------------|
| Age $\geq$ 60 At-risk vs<br>Age $\geq$ 60 Not at-risk | Positive            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0.26<br>(0.07, 0.42) | 0.12<br>(0.04, 0.25) | 0.14<br>(0.01, 0.27) |

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         |
|----------------|---------------------|---------|--------|-------------------------|------------------------|------------------------|-----------------------|
| <b>Sex</b>     |                     |         |        |                         |                        |                        |                       |
| Male vs Female | Negative            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(-0.02, 0.04)     | -0.02<br>(-0.09, 0.04) | 0.01<br>(-0.04, 0.06) |
| Male vs Female | Negative            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)           |
| Male vs Female | Negative            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | 0.04<br>(-0.04, 0.11)  | -0.01<br>(-0.07, 0.05) | 0.04<br>(-0.04, 0.11) |
| Male vs Female | Negative            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)           |
| Male vs Female | Negative            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.02<br>(-0.05, 0.09)  | 0<br>(-0.06, 0.05)     | 0<br>(-0.07, 0.06)    |
| Male vs Female | Negative            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)           |
| Male vs Female | Positive            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(-0.08, 0.08)     | 0.09<br>(-0.03, 0.22)  | 0.06<br>(-0.05, 0.17) |
| Male vs Female | Positive            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0.01<br>(-0.04, 0.06)  | 0.01<br>(-0.08, 0.11)  | 0<br>(-0.07, 0.07)    |
| Male vs Female | Positive            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | 0.03<br>(-0.09, 0.15)  | -0.04<br>(-0.14, 0.05) | 0<br>(-0.11, 0.1)     |
| Male vs Female | Positive            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | -0.01<br>(-0.13, 0.12) | -0.03<br>(-0.17, 0.1)  | 0.01<br>(-0.12, 0.15) |
| Male vs Female | Positive            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.06<br>(-0.08, 0.18)  | 0<br>(-0.07, 0.06)     | 0<br>(-0.11, 0.09)    |
| Male vs Female | Positive            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | -0.1<br>(-0.21, 0.02)  | 0.03<br>(-0.1, 0.16)   | 0.07<br>(-0.07, 0.2)  |

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           |
|--|---------------------|---------|--------|-------------------------|------------------------|------------------------|-------------------------|
| <b>Hispanic or Latino ethnicity</b>          |                     |         |        |                         |                        |                        |                         |
| Hispanic or Latino vs Not Hispanic or Latino | Negative            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | -0.02<br>(-0.05, 0.02) | -0.02<br>(-0.08, 0.04) | -0.02<br>(-0.07, 0.03)  |
| Hispanic or Latino vs Not Hispanic or Latino | Negative            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)             |
| Hispanic or Latino vs Not Hispanic or Latino | Negative            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | 0.03<br>(-0.04, 0.1)   | 0.04<br>(-0.02, 0.1)   | 0.05<br>(-0.03, 0.12)   |
| Hispanic or Latino vs Not Hispanic or Latino | Negative            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)             |
| Hispanic or Latino vs Not Hispanic or Latino | Negative            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | -0.02<br>(-0.09, 0.05) | -0.02<br>(-0.08, 0.03) | 0.01<br>(-0.06, 0.07)   |
| Hispanic or Latino vs Not Hispanic or Latino | Negative            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0<br>(0, 0)            | 0<br>(0, 0)            | 0<br>(0, 0)             |
| Hispanic or Latino vs Not Hispanic or Latino | Positive            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | -0.07<br>(-0.15, 0.02) | -0.12<br>(-0.24, 0.01) | -0.14<br>(-0.25, -0.02) |
| Hispanic or Latino vs Not Hispanic or Latino | Positive            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | -0.03<br>(-0.08, 0.03) | -0.07<br>(-0.17, 0.03) | -0.01<br>(-0.09, 0.06)  |
| Hispanic or Latino vs Not Hispanic or Latino | Positive            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | -0.08<br>(-0.2, 0.04)  | 0.04<br>(-0.06, 0.12)  | -0.02<br>(-0.13, 0.08)  |
| Hispanic or Latino vs Not Hispanic or Latino | Positive            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | -0.07<br>(-0.19, 0.07) | -0.05<br>(-0.18, 0.09) | 0<br>(-0.14, 0.13)      |
| Hispanic or Latino vs Not Hispanic or Latino | Positive            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | -0.04<br>(-0.17, 0.09) | 0.04<br>(-0.03, 0.11)  | 0.03<br>(-0.08, 0.12)   |

(continued)

| Comparison                                      | Baseline SARS-CoV-2 | Arm     | Visit  | Marker                  | Responder             | % 2-Fold Rise         | % 4-Fold Rise          |
|---|---------------------|---------|--------|-------------------------|-----------------------|-----------------------|------------------------|
| Hispanic or Latino vs<br>Not Hispanic or Latino | Positive            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | -0.02<br>(-0.14, 0.1) | -0.07<br>(-0.2, 0.07) | -0.04<br>(-0.18, 0.09) |

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 Underrepresented Minority Status in the U.S.

| Comparison  | Baseline SARS-CoV-2 | Arm     | Visit  | Marker                  | Responder               | % 2-Fold Rise           | % 4-Fold Rise           |
|---|---------------------|---------|--------|-------------------------|-------------------------|-------------------------|-------------------------|
| <b>Underrepresented Minority Status in the U.S.</b> |                     |         |        |                         |                         |                         |                         |
| URM vs Non-URM                                      | Negative            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | -0.02<br>(-0.07, 0.02)  | -0.08<br>(-0.16, 0.01)  | -0.03<br>(-0.1, 0.04)   |
| URM vs Non-URM                                      | Negative            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(0, 0)             | 0<br>(0, 0)             | 0<br>(0, 0)             |
| URM vs Non-URM                                      | Negative            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | -0.02<br>(-0.11, 0.08)  | 0<br>(-0.08, 0.09)      | 0.02<br>(-0.08, 0.11)   |
| URM vs Non-URM                                      | Negative            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0<br>(0, 0)             | 0<br>(0, 0)             | 0<br>(0, 0)             |
| URM vs Non-URM                                      | Negative            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | -0.04<br>(-0.14, 0.05)  | 0.01<br>(-0.06, 0.08)   | 0.01<br>(-0.08, 0.1)    |
| URM vs Non-URM                                      | Negative            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0<br>(0, 0)             | 0<br>(0, 0)             | 0<br>(0, 0)             |
| URM vs Non-URM                                      | Positive            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | -0.12<br>(-0.24, -0.03) | -0.24<br>(-0.39, -0.07) | -0.17<br>(-0.31, -0.01) |
| URM vs Non-URM                                      | Positive            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | -0.04<br>(-0.14, 0.01)  | -0.1<br>(-0.24, 0.03)   | -0.01<br>(-0.12, 0.09)  |
| URM vs Non-URM                                      | Positive            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | -0.28<br>(-0.42, -0.11) | -0.09<br>(-0.23, 0.04)  | -0.24<br>(-0.39, -0.09) |
| URM vs Non-URM                                      | Positive            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | -0.01<br>(-0.17, 0.16)  | 0<br>(-0.16, 0.17)      | -0.03<br>(-0.19, 0.14)  |
| URM vs Non-URM                                      | Positive            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | -0.1<br>(-0.27, 0.07)   | -0.1<br>(-0.22, 0.04)   | -0.08<br>(-0.22, 0.06)  |
| URM vs Non-URM                                      | Positive            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0<br>(-0.15, 0.14)      | -0.09<br>(-0.25, 0.08)  | -0.06<br>(-0.23, 0.1)   |

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

Table 10j. Differences in the responder rates, 2FRs, 4FRs between the groups by HIV Infection

| Comparison           | Baseline SARS-CoV-2 | Arm     | Visit  | Marker                  | Responder              | % 2-Fold Rise           | % 4-Fold Rise           |
|----------------------|---------------------|---------|--------|-------------------------|------------------------|-------------------------|-------------------------|
| <b>HIV Infection</b> |                     |         |        |                         |                        |                         |                         |
| Positive vs Negative | Negative            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(-0.04, 0.08)     | -0.05<br>(-0.14, 0.07)  | -0.01<br>(-0.09, 0.1)   |
| Positive vs Negative | Negative            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0<br>(0, 0)            | 0<br>(0, 0)             | 0<br>(0, 0)             |
| Positive vs Negative | Negative            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | -0.08<br>(-0.23, 0.07) | -0.19<br>(-0.34, -0.05) | -0.13<br>(-0.28, 0.02)  |
| Positive vs Negative | Negative            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | 0<br>(0, 0)            | 0<br>(0, 0)             | 0<br>(0, 0)             |
| Positive vs Negative | Negative            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | -0.14<br>(-0.26, 0.01) | -0.13<br>(-0.28, -0.01) | -0.16<br>(-0.31, -0.02) |
| Positive vs Negative | Negative            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | 0<br>(0, 0)            | 0<br>(0, 0)             | 0<br>(0, 0)             |
| Positive vs Negative | Positive            | Vaccine | Day 29 | Anti N IgG (BAU/ml)     | 0.07<br>(-0.07, 0.42)  | 0.02<br>(-0.22, 0.33)   | 0.05<br>(-0.14, 0.36)   |
| Positive vs Negative | Positive            | Placebo | Day 29 | Anti N IgG (BAU/ml)     | 0.08<br>(-0.02, 0.56)  | -0.05<br>(-0.19, 0.35)  | 0.04<br>(-0.09, 0.46)   |
| Positive vs Negative | Positive            | Vaccine | Day 29 | Anti RBD IgG (BAU/ml)   | 0.03<br>(-0.29, 0.2)   | 0.12<br>(0.08, 0.17)    | 0.03<br>(-0.3, 0.17)    |
| Positive vs Negative | Positive            | Placebo | Day 29 | Anti RBD IgG (BAU/ml)   | -0.06<br>(-0.29, 0.31) | 0.02<br>(-0.42, 0.29)   | -0.11<br>(-0.38, 0.25)  |
| Positive vs Negative | Positive            | Vaccine | Day 29 | Anti Spike IgG (BAU/ml) | 0.16<br>(-0.2, 0.34)   | 0<br>(-0.28, 0.06)      | 0.08<br>(-0.2, 0.15)    |
| Positive vs Negative | Positive            | Placebo | Day 29 | Anti Spike IgG (BAU/ml) | -0.02<br>(-0.25, 0.34) | -0.2<br>(-0.55, 0.13)   | -0.18<br>(-0.47, 0.17)  |

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

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

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

| Visit  | Marker                  | Baseline SARS-CoV-2 Negative |   |                         |     |                                |                      |                      |                         |
|--------|-------------------------|------------------------------|---|-------------------------|-----|--------------------------------|----------------------|----------------------|-------------------------|
|        |                         | Vaccine                      |   |                         |     | Placebo                        |                      |                      |                         |
|        |                         | N                            | Resp rate                               | GMT/GMC                 | N   | Resp rate                      | GMT/GMC              | Resp Rate Difference | GMTR/GMCR               |
| Day 29 | Anti N IgG (BAU/ml)     | 913                          | 1147.9/19292 = 6.0%<br>(4.7%, 7.5%)     | 1.41<br>(1.24, 1.59)    | 109 | 0/19333 = 0.0%<br>(0.0%, 0.0%) | 0.05<br>(0.05, 0.05) | 0.06<br>(0.05, 0.08) | 29.98<br>(26.53, 33.88) |
| Day 29 | Anti RBD IgG (BAU/ml)   | 913                          | 10495.8/19292 = 54.4%<br>(50.8%, 58.0%) | 17.09<br>(15.39, 18.96) | 109 | 0/19333 = 0.0%<br>(0.0%, 0.0%) | 0.80<br>(0.80, 0.80) | 0.54<br>(0.51, 0.58) | 21.44<br>(19.32, 23.80) |
| Day 29 | Anti Spike IgG (BAU/ml) | 913                          | 9225.7/19292 = 47.8%<br>(44.3%, 51.3%)  | 9.28<br>(8.44, 10.21)   | 109 | 0/19333 = 0.0%<br>(0.0%, 0.0%) | 0.15<br>(0.15, 0.15) | 0.48<br>(0.44, 0.51) | 60.35<br>(54.88, 66.38) |

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

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

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

| Visit  | Marker                  | Baseline SARS-CoV-2 Positive |                                       |                         |     |                                      |                       |                      |                      |
|--------|-------------------------|------------------------------|---------------------------------------|-------------------------|-----|--------------------------------------|-----------------------|----------------------|----------------------|
|        |                         | Vaccine                      |                                       |                         |     | Placebo                              |                       |                      |                      |
|        |                         | N                            | Resp rate                             | GMT/GMC                 | N   | Resp rate                            | GMT/GMC               | Resp Rate Difference | GMTR/GMCR            |
| Day 29 | Anti N IgG (BAU/ml)     | 283                          | 222.1/2102 = 10.6%<br>(7.4%, 14.9%)   | 2.52<br>(2.00, 3.19)    | 280 | 61.5/1979 = 3.1%<br>(1.6%, 5.8%)     | 0.87<br>(0.70, 1.09)  | 0.07<br>(0.03, 0.12) | 2.90<br>(2.10, 4.00) |
| Day 29 | Anti RBD IgG (BAU/ml)   | 283                          | 1569.2/2102 = 74.7%<br>(68.5%, 80.0%) | 30.05<br>(25.07, 36.02) | 280 | 753.1/1979 = 38.1%<br>(32.2%, 44.3%) | 9.52<br>(7.86, 11.52) | 0.37<br>(0.28, 0.45) | 3.16<br>(2.43, 4.11) |
| Day 29 | Anti Spike IgG (BAU/ml) | 283                          | 1310.4/2102 = 62.3%<br>(55.7%, 68.6%) | 14.92<br>(12.80, 17.39) | 280 | 636.7/1979 = 32.2%<br>(26.9%, 37.9%) | 5.00<br>(4.20, 5.95)  | 0.3<br>(0.21, 0.38)  | 2.98<br>(2.37, 3.76) |

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

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

Table 13. Antibody levels in the per-protocol cohort (vaccine recipients)

| Visit  | Marker                  | N   | Baseline SARS-CoV-2 Positive          |                         | Vaccine Recipients |   |                         | Comparison           |                      |
|--------|-------------------------|-----|---------------------------------------|-------------------------|--------------------|---|-------------------------|----------------------|----------------------|
|        |                         |     | Resp rate                             | GMT/GMC                 | N                  | Resp rate                               | GMT/GMC                 | Resp Rate Difference | GMTR/GMCR            |
| Day 29 | Anti N IgG (BAU/ml)     | 283 | 222.1/2102 = 10.6%<br>(7.4%, 14.9%)   | 2.52<br>(2.00, 3.19)    | 913                | 1147.9/19292 = 6.0%<br>(4.7%, 7.5%)     | 1.41<br>(1.24, 1.59)    | 0.05<br>(0.01, 0.09) | 1.80<br>(1.38, 2.34) |
| Day 29 | Anti RBD IgG (BAU/ml)   | 283 | 1569.2/2102 = 74.7%<br>(68.5%, 80.0%) | 30.05<br>(25.07, 36.02) | 913                | 10495.8/19292 = 54.4%<br>(50.8%, 58.0%) | 17.09<br>(15.39, 18.96) | 0.2<br>(0.13, 0.27)  | 1.76<br>(1.43, 2.17) |
| Day 29 | Anti Spike IgG (BAU/ml) | 283 | 1310.4/2102 = 62.3%<br>(55.7%, 68.6%) | 14.92<br>(12.80, 17.39) | 913                | 9225.7/19292 = 47.8%<br>(44.3%, 51.3%)  | 9.28<br>(8.44, 10.21)   | 0.15<br>(0.07, 0.22) | 1.61<br>(1.34, 1.93) |

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

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

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

| Visit  | Marker                  | N   | Placebo Recipients                   |                       |                              |                                | Comparison           |  |
|--------|-------------------------|-----|--------------------------------------|-----------------------|------------------------------|--------------------------------|----------------------|--|
|        |                         |     | Baseline SARS-CoV-2 Positive         |                       | Baseline SARS-CoV-2 Negative |                                | Resp Rate Difference | GMTR/GMCR                                    |
|        |                         |     | Resp rate                            | GMT/GMC               | N                            | Resp rate                      | GMT/GMC              |  |
| Day 29 | Anti N IgG (BAU/ml)     | 280 | 61.5/1979 = 3.1%<br>(1.6%, 5.8%)     | 0.87<br>(0.70, 1.09)  | 109                          | 0/19333 = 0.0%<br>(0.0%, 0.0%) | 0.05<br>(0.05, 0.05) | 0.03<br>(0.02, 0.06) 18.57<br>(14.85, 23.22) |
| Day 29 | Anti RBD IgG (BAU/ml)   | 280 | 753.1/1979 = 38.1%<br>(32.2%, 44.3%) | 9.52<br>(7.86, 11.52) | 109                          | 0/19333 = 0.0%<br>(0.0%, 0.0%) | 0.80<br>(0.80, 0.80) | 0.38<br>(0.32, 0.44) 11.94<br>(9.86, 14.46)  |
| Day 29 | Anti Spike IgG (BAU/ml) | 280 | 636.7/1979 = 32.2%<br>(26.9%, 37.9%) | 5.00<br>(4.20, 5.95)  | 109                          | 0/19333 = 0.0%<br>(0.0%, 0.0%) | 0.15<br>(0.15, 0.15) | 0.32<br>(0.27, 0.38) 32.53<br>(27.33, 38.71) |

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

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## Chapter 2

# Graphical Description of Immunogenicity Data

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

#### 2.1.1 Baseline SARS-CoV-2 Negative

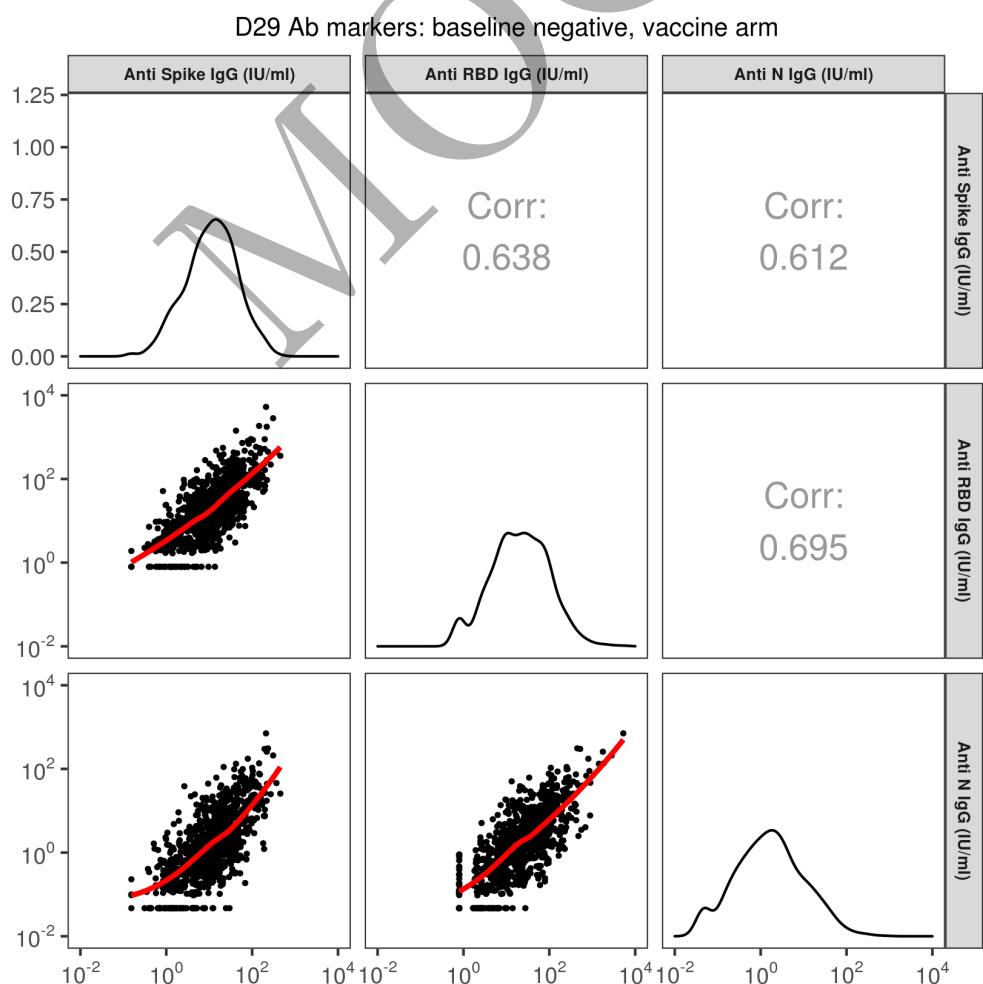


Figure 2.1: Pair plots of D29 Ab markers: baseline negative vaccine arm

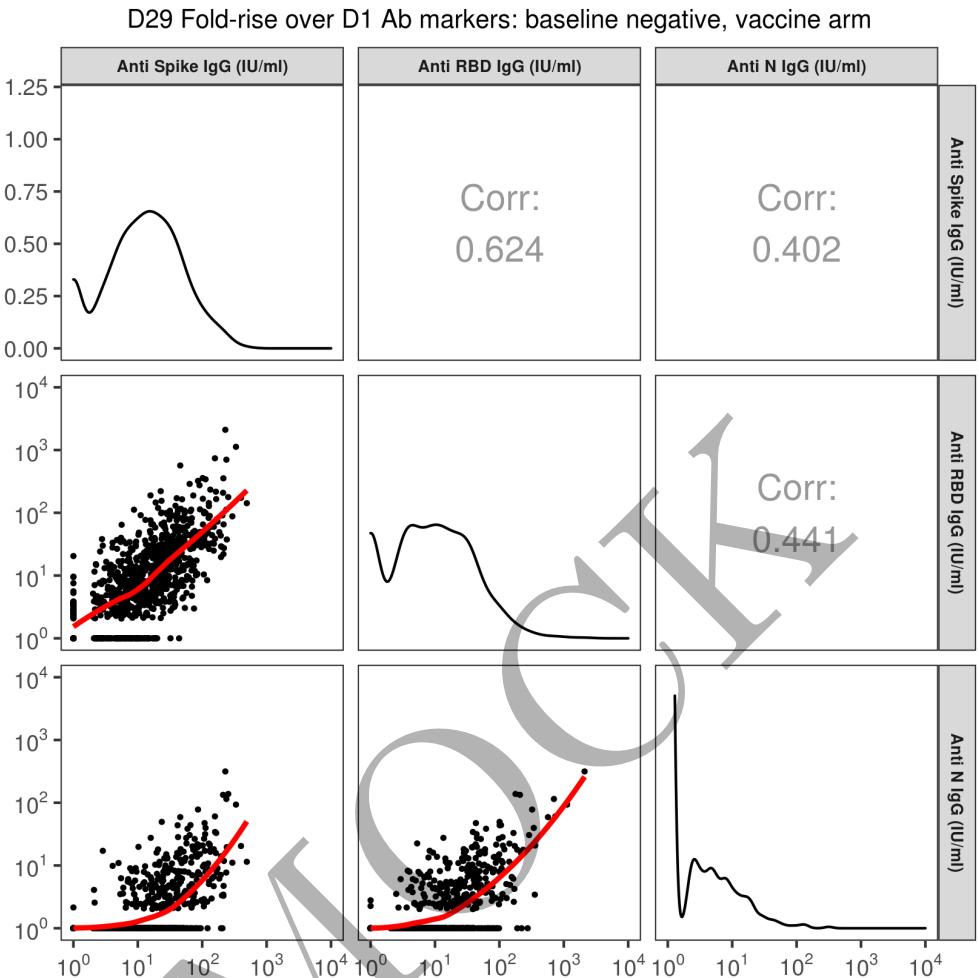


Figure 2.2: Pair plots of D29 fold-rise over D1 Ab markers: baseline negative vaccine arm

### 2.1.2 Baseline SARS-CoV-2 Positive

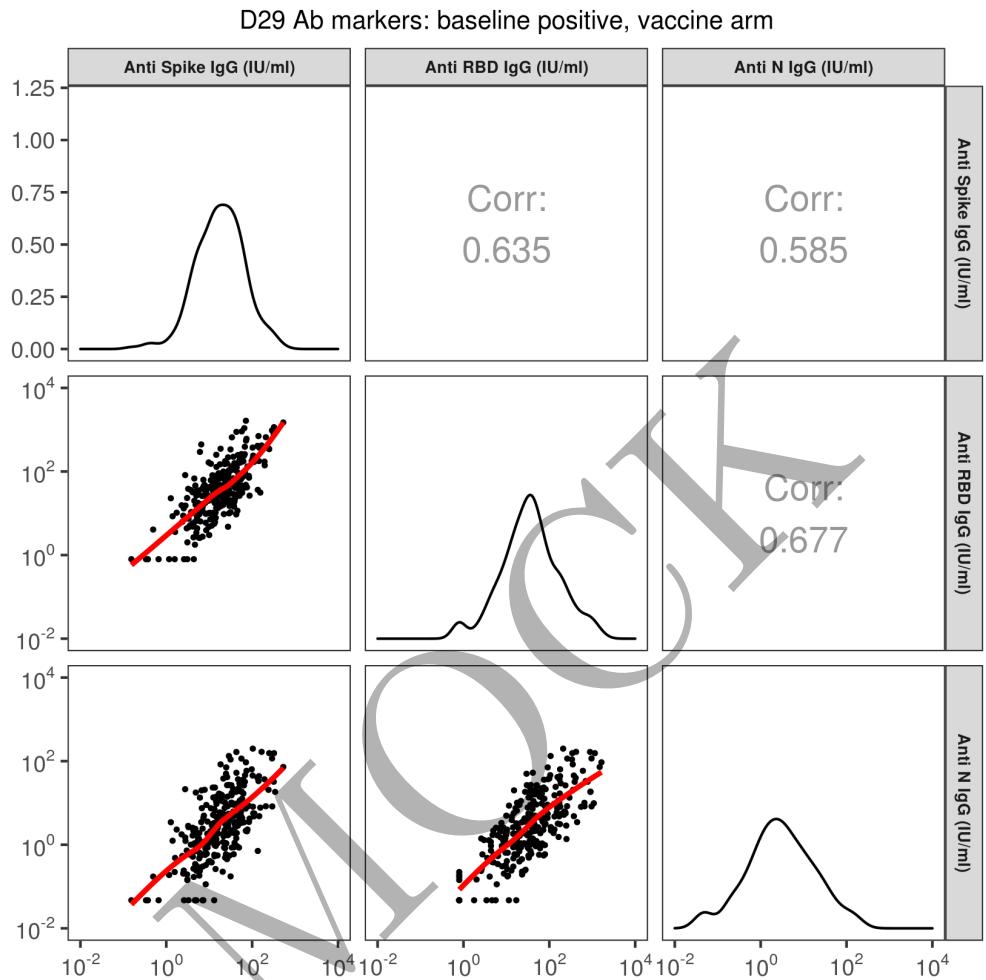


Figure 2.3: Pair plots of D29 Ab markers: baseline positive vaccine arm

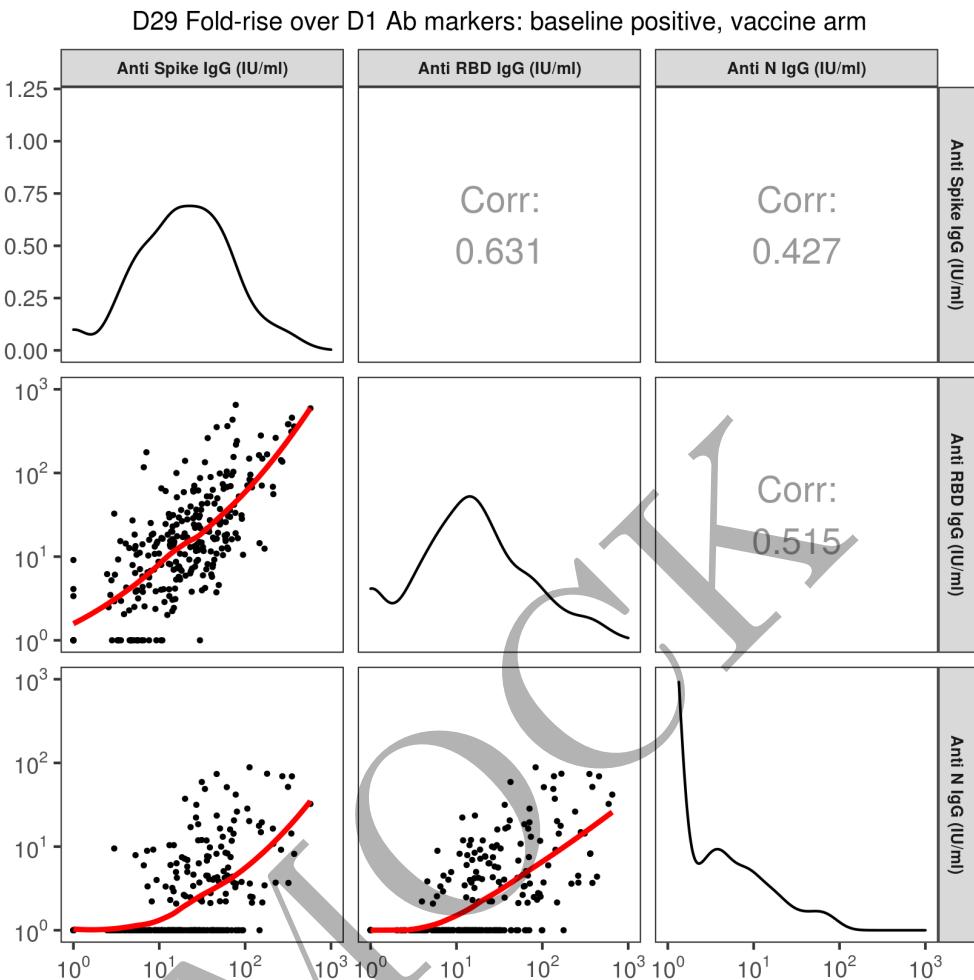


Figure 2.4: Pair plots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm

### 2.1.3 Baseline SARS-CoV-2 Positive Placebo Arm

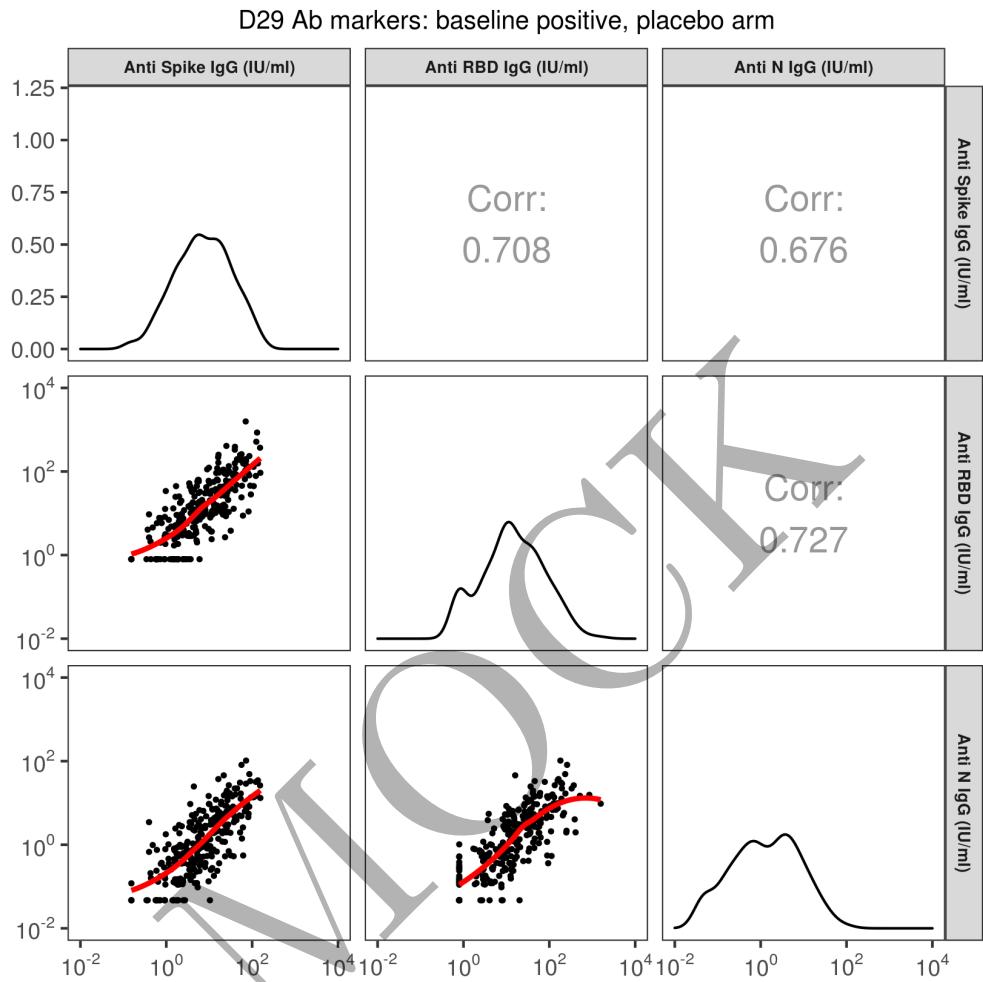


Figure 2.5: Pair plots of D29 Ab markers: baseline positive placebo arm

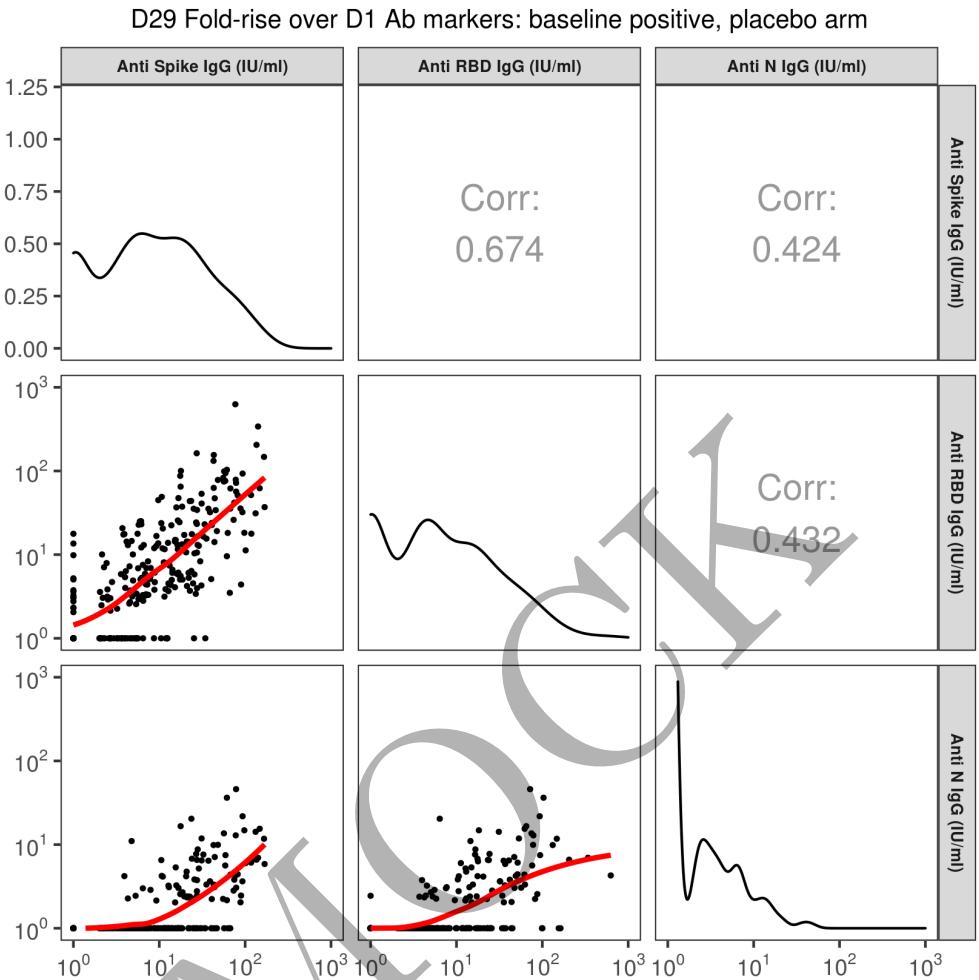


Figure 2.6: Pair plots of D29 fold-rise over D1 Ab markers: baseline positive placebo arm

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

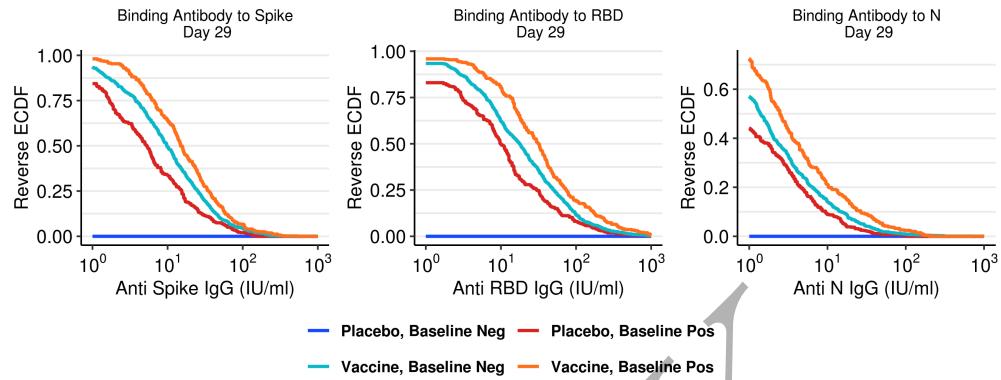


Figure 2.7: RCDF plots for D29 Ab markers: by baseline status x randomization arm



Figure 2.8: RCDF plots for D29 fold-rise over D1 Ab markers: by baseline status x randomization arm



Figure 2.9: RCDF plots for D29 bAb markers: by baseline status for the vaccine arm

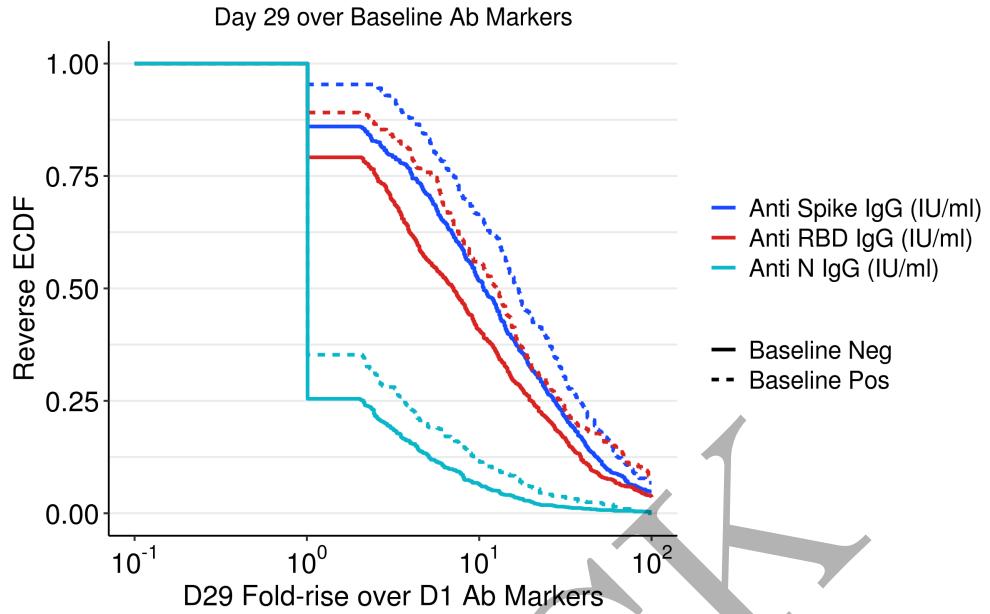


Figure 2.10: RCDF plots for D29 over D1 fold-rise bAb markers: by baseline status for the vaccine arm



Figure 2.11: RCDF plots for D29 bAb markers: baseline negative vaccine arm



Figure 2.12: RCDF plots for D29 fold-rise over D1 bAb markers: baseline negative vaccine arm

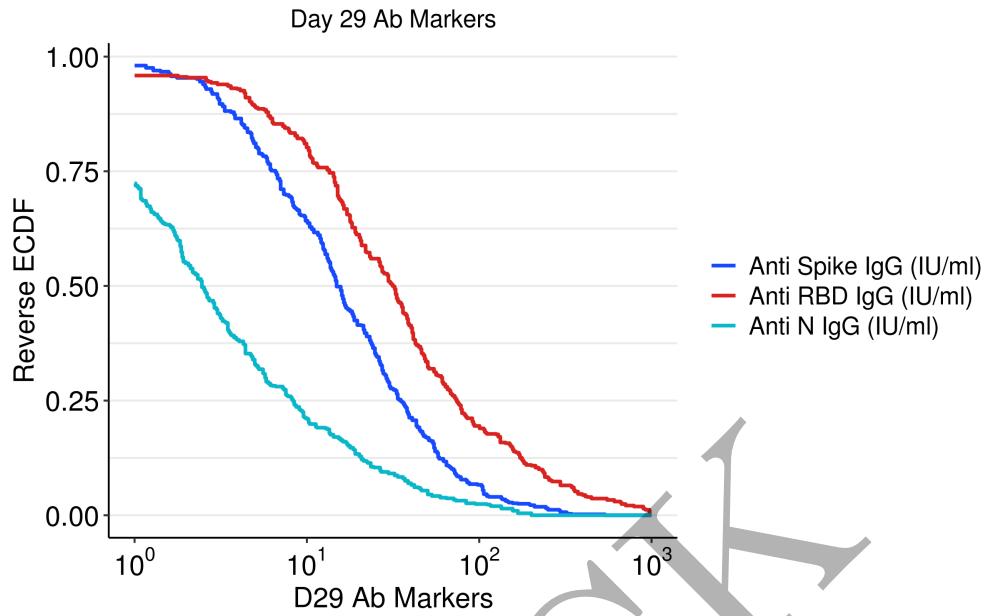


Figure 2.13: RCDF plots for D29 bAb markers: baseline positive vaccine arm



Figure 2.14: RCDF plots for D29 fold-rise over D1 bAb markers: baseline positive vaccine arm

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

### 2.3.1 Baseline SARS-CoV-2 Negative

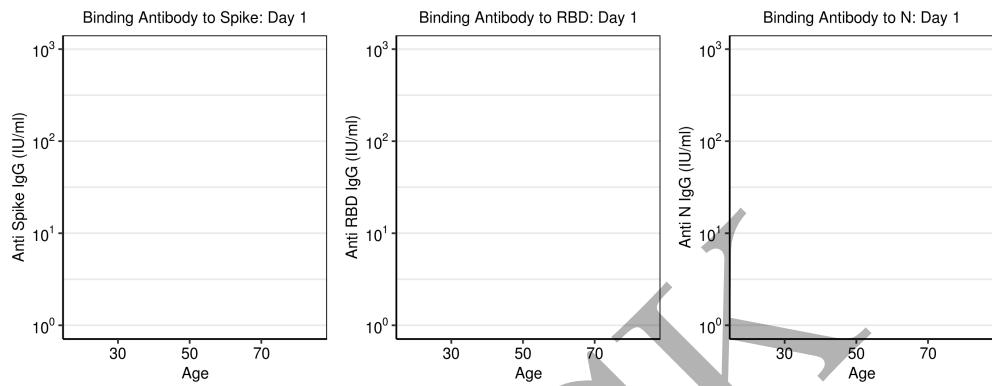


Figure 2.15: Scatter plots for D1 Ab markers vs. age: baseline negative vaccine arm

2.3. SCATTER PLOTS OF ANTIBODY MARKERS VERSUS AGE FOR OVERALL PER-PROTOCOL COHORT 275

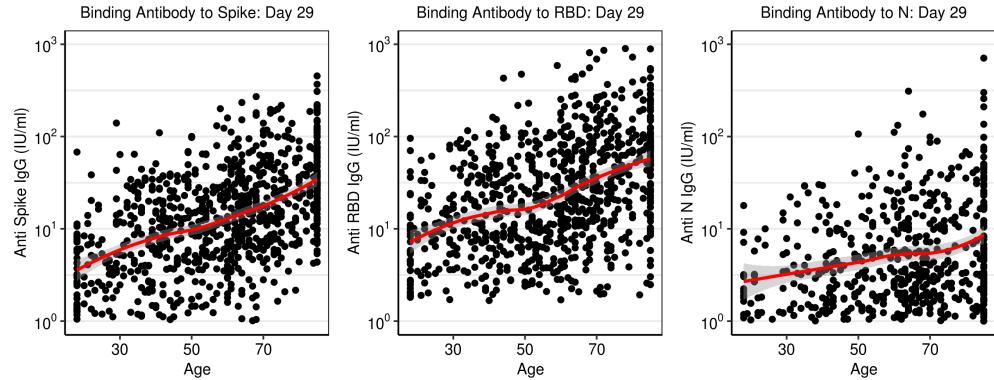


Figure 2.16: Scatter plots for D29 Ab markers vs. age: baseline negative vaccine arm

### 2.3.2 Baseline SARS-CoV-2 Positive



Figure 2.17: Scatter plots for D1 Ab markers vs. age: baseline positive vaccine arm

2.3. SCATTER PLOTS OF ANTIBODY MARKERS VERSUS AGE FOR OVERALL PER-PROTOCOL COHORT 277

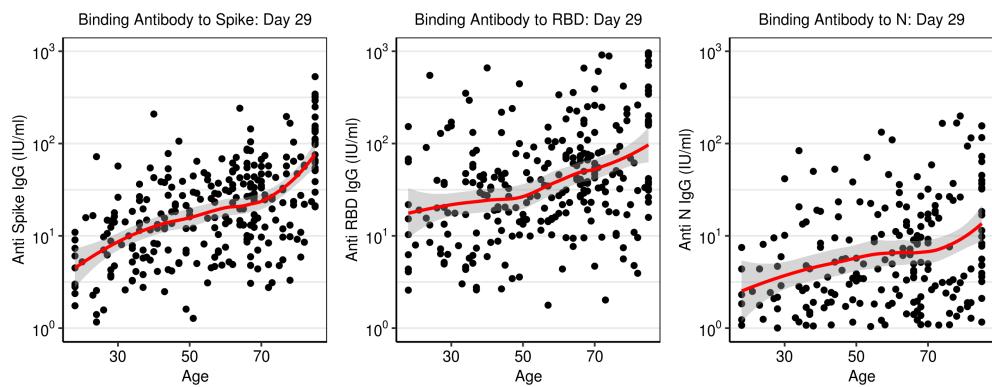


Figure 2.18: Scatter plots for D29 Ab markers vs. age: baseline positive vaccine arm

### 2.3.3 Baseline SARS-CoV-2 Positive Placebo Arm



Figure 2.19: Scatter plots for D1 Ab markers vs. age: baseline positive placebo arm

2.3. SCATTER PLOTS OF ANTIBODY MARKERS VERSUS AGE FOR OVERALL PER-PROTOCOL COHORT279

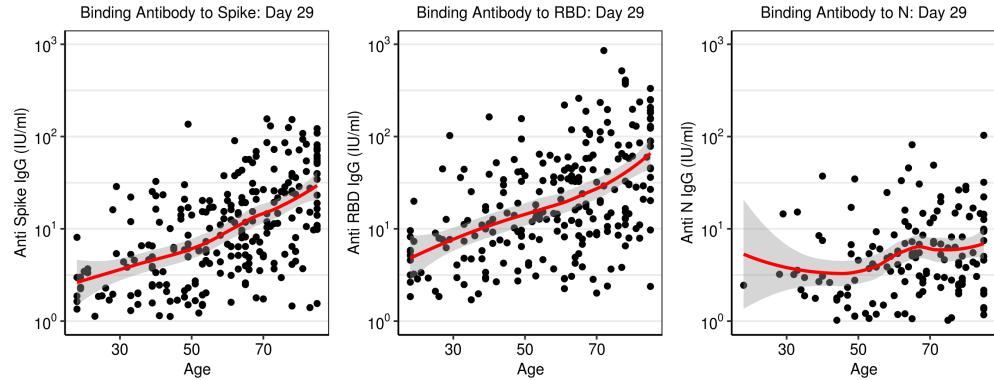


Figure 2.20: Scatter plots for D29 Ab markers vs. age: baseline positive placebo arm

### 2.3.4 Baseline SARS-CoV-2 Negative Placebo Arm

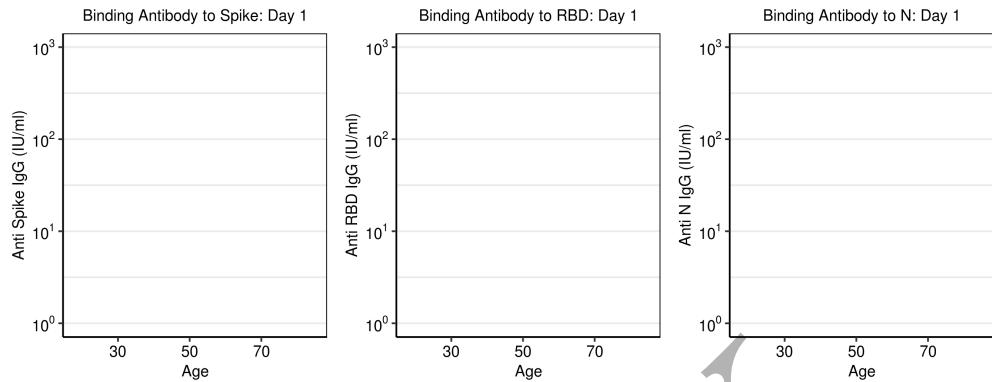


Figure 2.21: Scatter plots for D1 Ab markers vs. age: baseline negative placebo arm

### 2.3. SCATTER PLOTS OF ANTIBODY MARKERS VERSUS AGE FOR OVERALL PER-PROTOCOL COHORT281

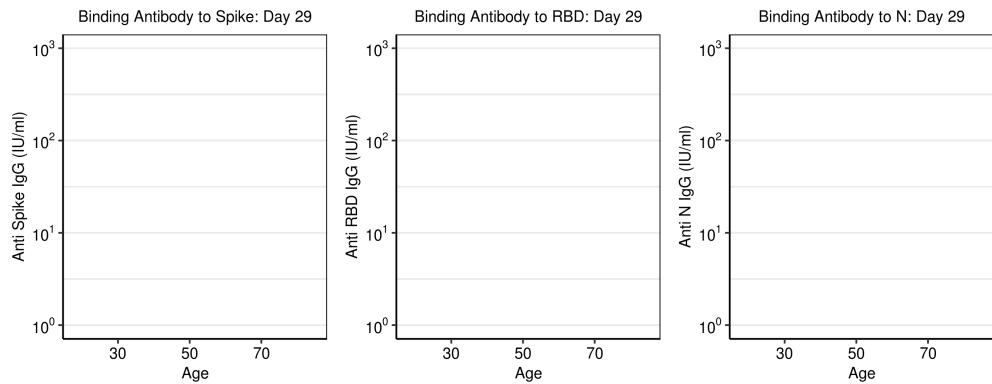


Figure 2.22: Scatter plots for D29 Ab markers vs. age: baseline negative placebo arm

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

### 2.4.1 Baseline SARS-CoV-2 Negative



Figure 2.23: Boxplots of D1 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.



Figure 2.24: Boxplots of D29 Ab markers: baseline negative vaccine + placebo arms. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

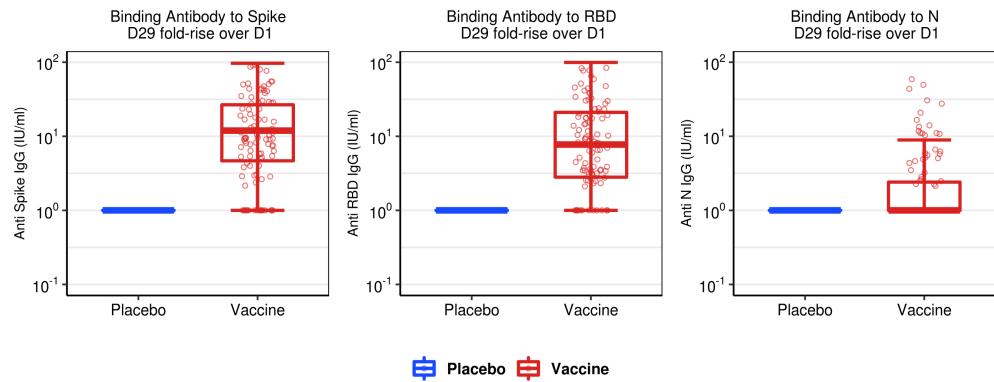


Figure 2.25: Boxplots of D29 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

### 2.4.2 Baseline SARS-CoV-2 Positive

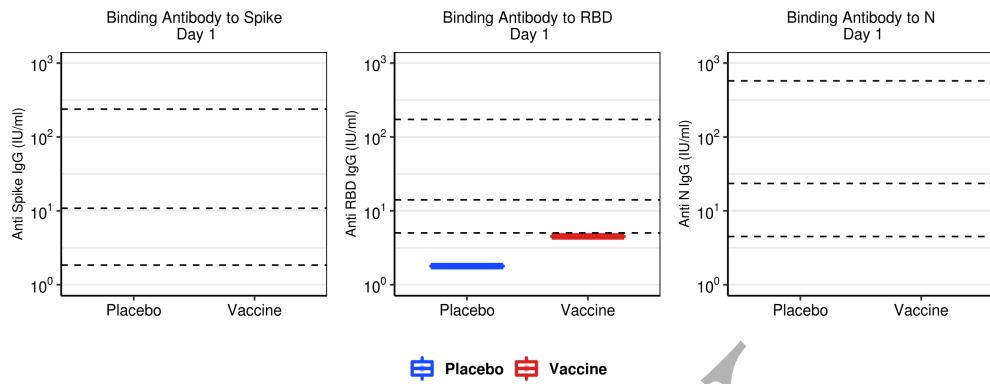


Figure 2.26: Boxplots of D1 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

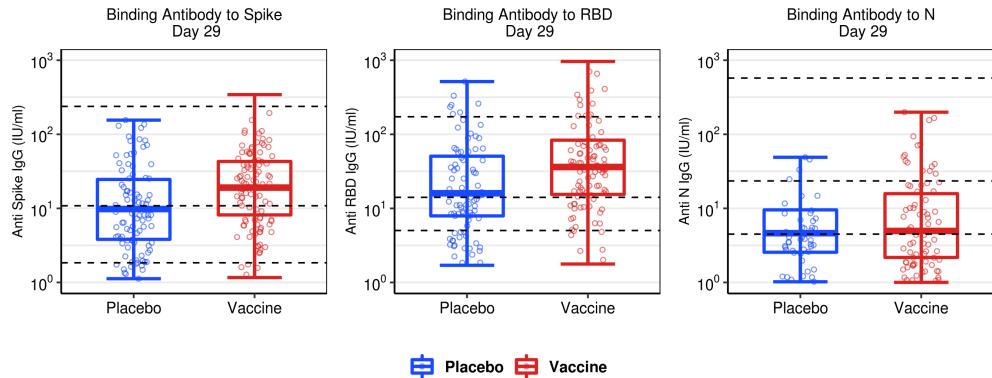


Figure 2.27: Boxplots of D29 Ab markers: baseline positive vaccine + placebo arms. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.



Figure 2.28: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms

### 2.4.3 Baseline negative vs. positive vaccine recipients



Figure 2.29: Boxplots of D1 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.



Figure 2.30: Boxplots of D29 Ab markers: baseline positive + negative vaccine arm. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.



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

#### 2.4.4 Baseline negative vs. positive placebo recipients



Figure 2.32: Boxplots of D1 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.



Figure 2.33: Boxplots of D29 Ab markers: baseline positive + negative placebo arm. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.



Figure 2.34: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

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

### 2.5.1 Baseline SARS-CoV-2 Negative

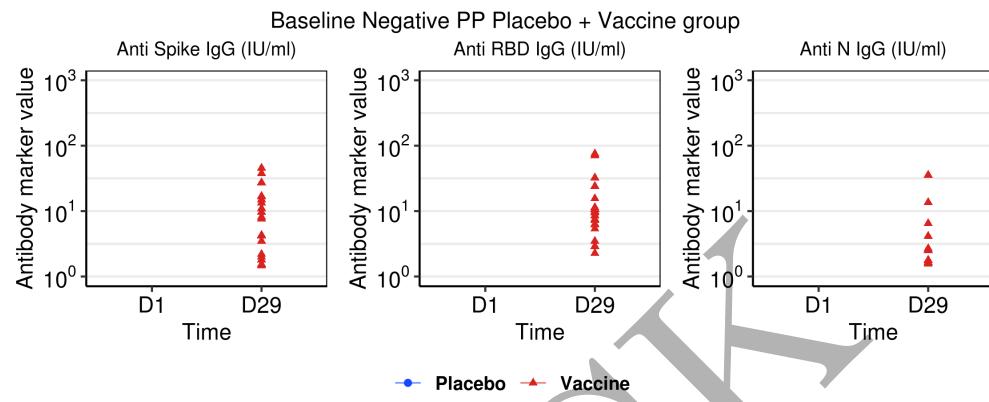


Figure 2.35: Spaghetti plots of Ab markers over time: baseline negative vaccine + placebo arm

### 2.5.2 Baseline SARS-CoV-2 Positive



Figure 2.36: Spaghetti plots of Ab markers over time: baseline positive vaccine + placebo arm

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

### 2.6.1 Baseline SARS-CoV-2 Negative

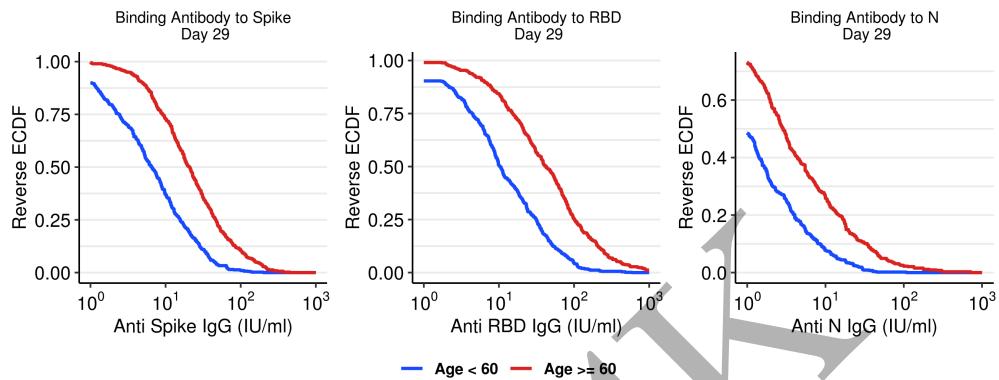


Figure 2.37: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age groups.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT297



Figure 2.38: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

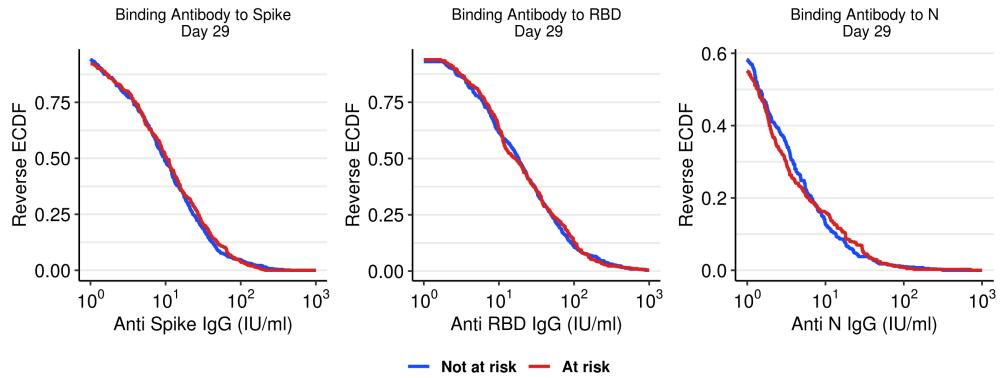


Figure 2.39: RCDF plots for D29 Ab markers: baseline negative vaccine arm by high-risk condition.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT299



Figure 2.40: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

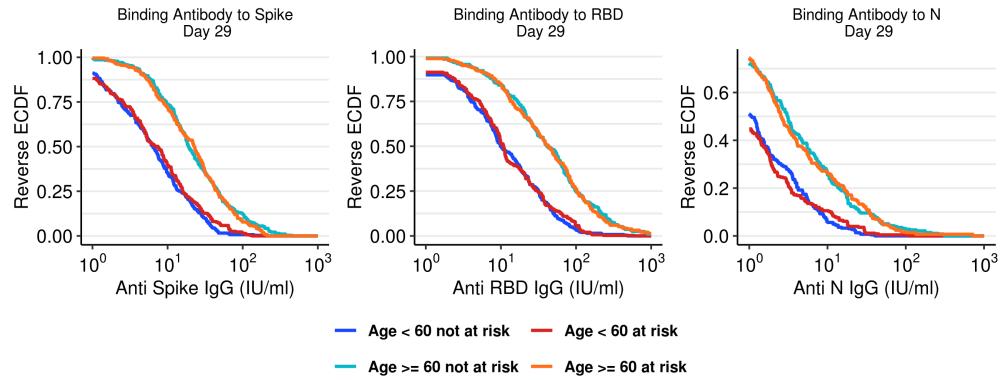


Figure 2.41: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and high-risk condition.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT301



Figure 2.42: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.



Figure 2.43: RCDF plots for D29 Ab markers: baseline negative vaccine arm by sex assigned at birth.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT303



Figure 2.44: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

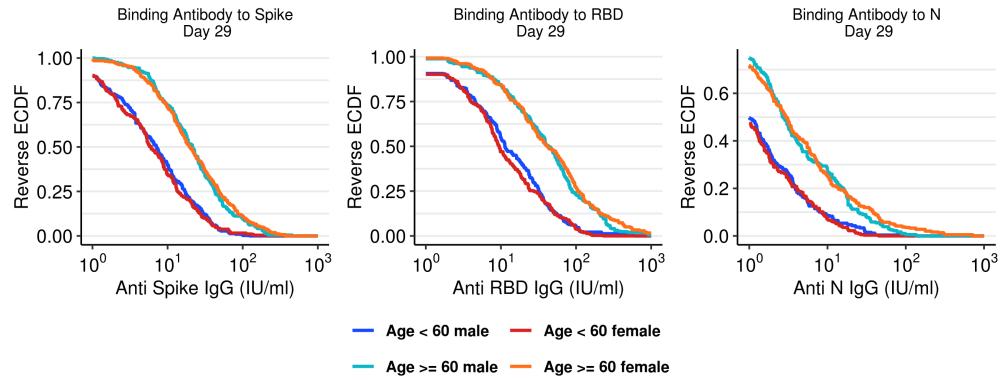


Figure 2.45: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT305

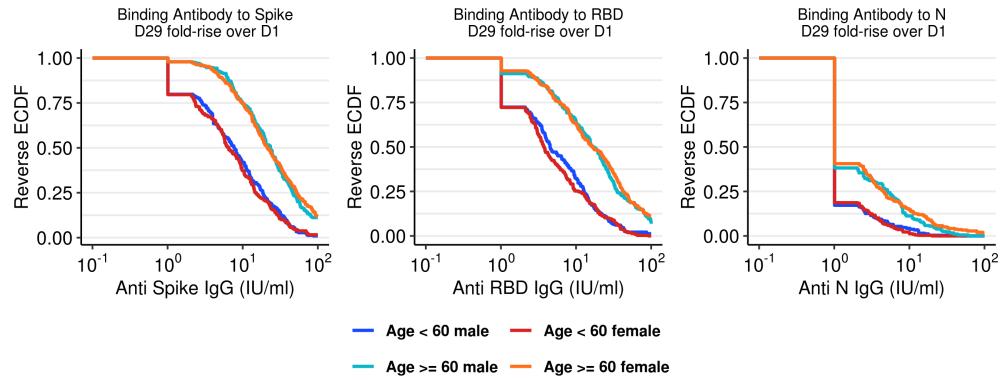


Figure 2.46: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

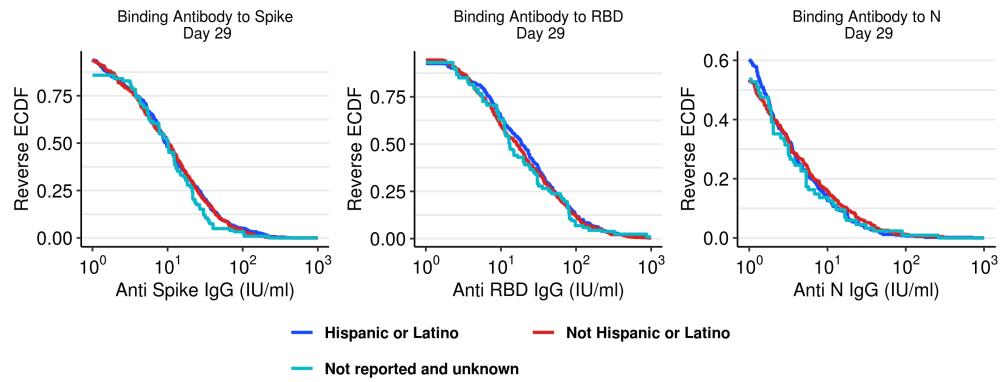


Figure 2.47: RCDF plots for D29 Ab markers: baseline negative vaccine arm by ethnicity.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT307



Figure 2.48: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

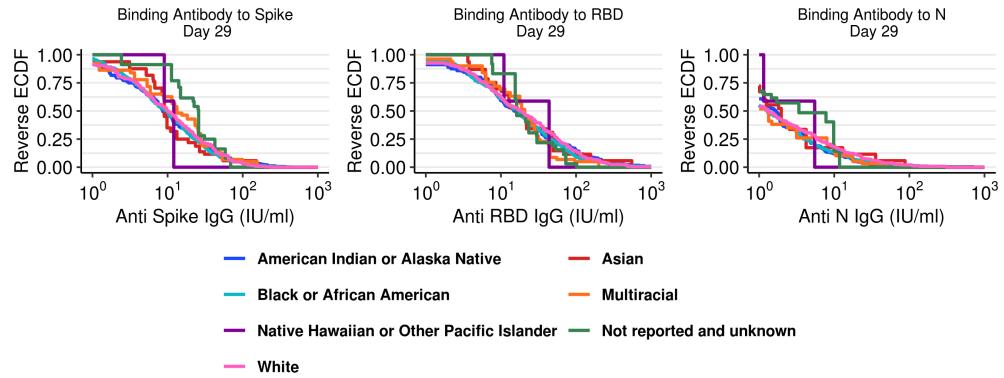


Figure 2.49: RCDF plots for D29 Ab markers: baseline negative vaccine arm by race.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT309



Figure 2.50: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

MOCK



Figure 2.51: RCDF plots for D29 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT311



Figure 2.52: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.

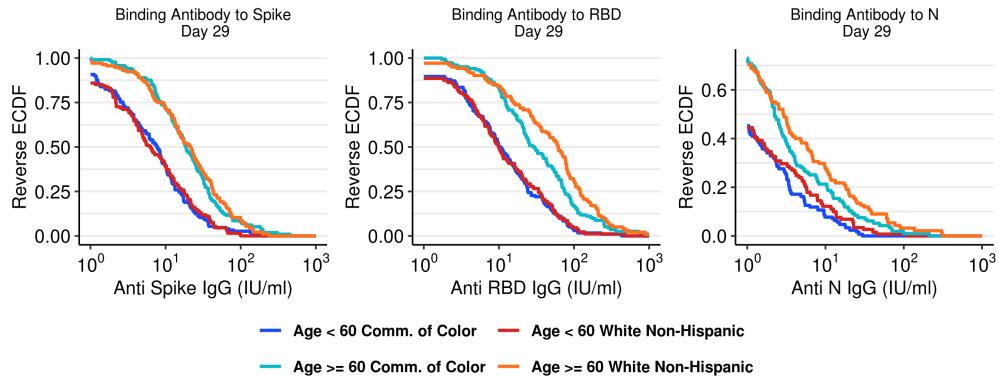


Figure 2.53: RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT313

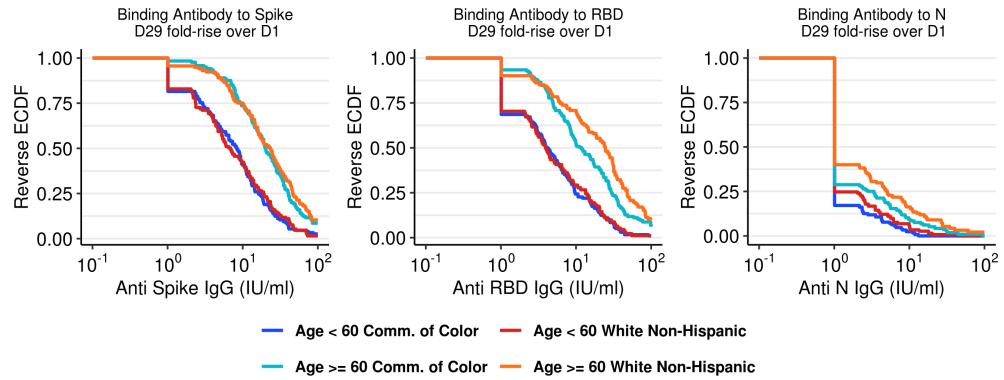


Figure 2.54: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.



Figure 2.55: RCDF plots for D29 Ab markers: baseline negative vaccine arm by country of residence.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT315

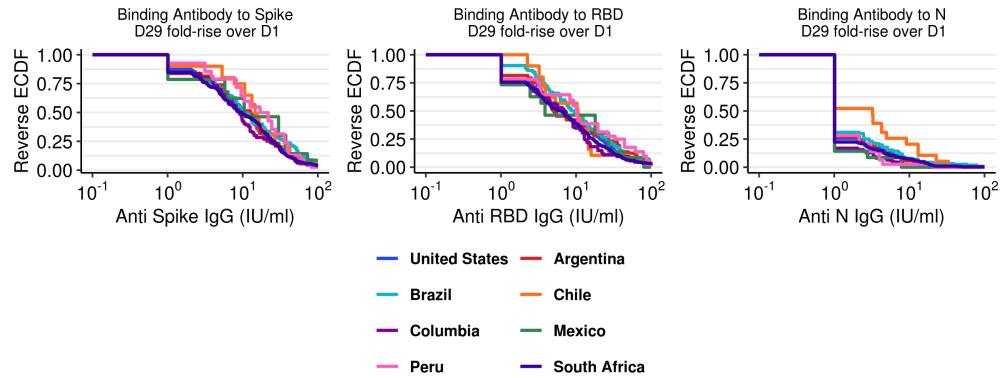


Figure 2.56: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by country of residence.

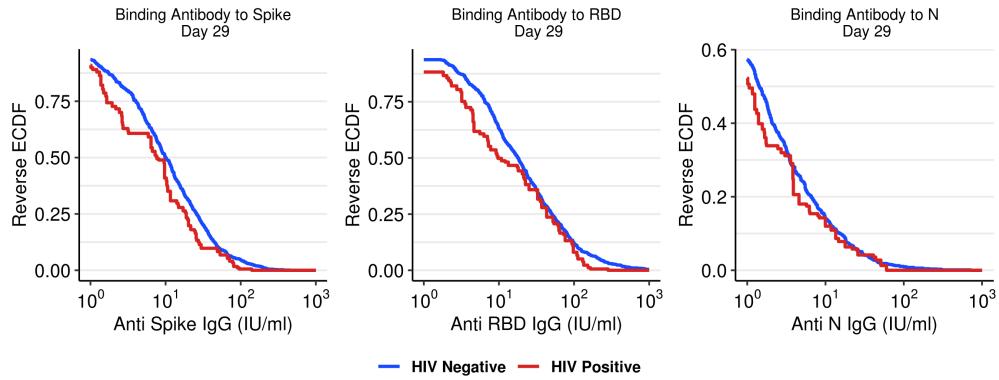


Figure 2.57: RCDF plots for D29 Ab markers: baseline negative vaccine arm by HIV positivity.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT317



Figure 2.58: RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by HIV positivity.

### 2.6.2 Baseline SARS-CoV-2 Positive



Figure 2.59: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age groups.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT319



Figure 2.60: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

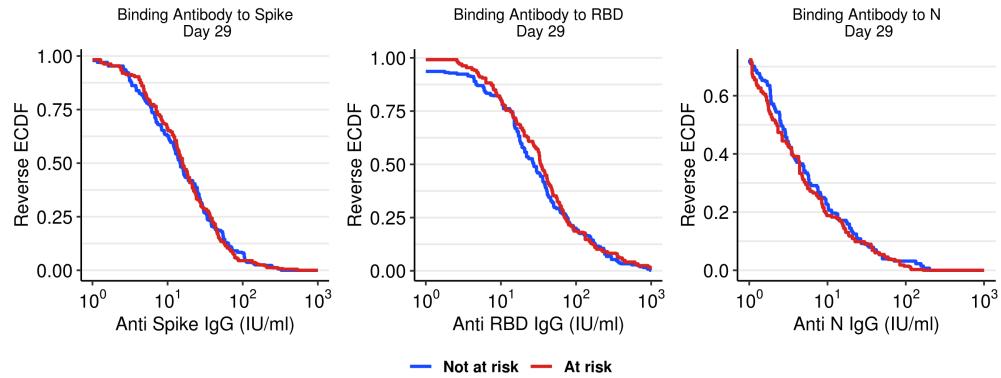


Figure 2.61: RCDF plots for D29 Ab markers: baseline positive vaccine arm by high-risk condition.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT321



Figure 2.62: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

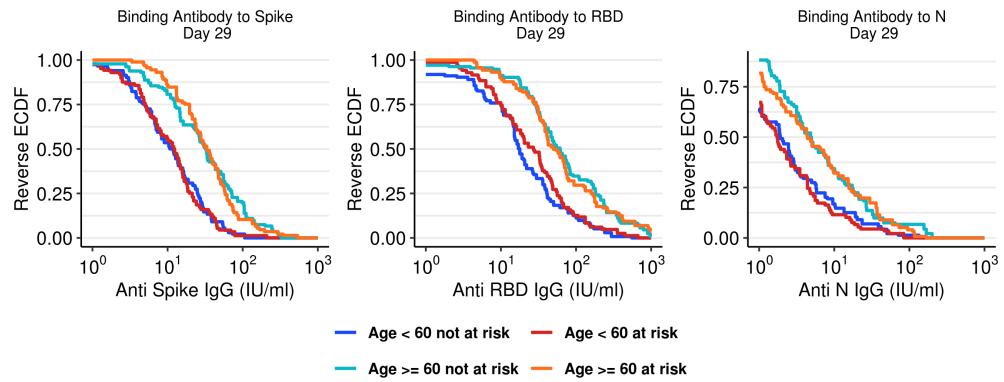


Figure 2.63: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and high-risk condition.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT323

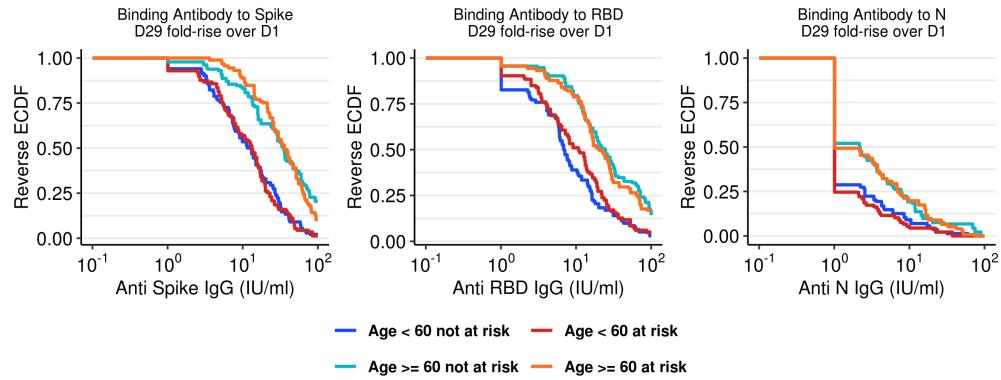


Figure 2.64: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.



Figure 2.65: RCDF plots for D29 Ab markers: baseline positive vaccine arm by sex assigned at birth.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT325



Figure 2.66: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

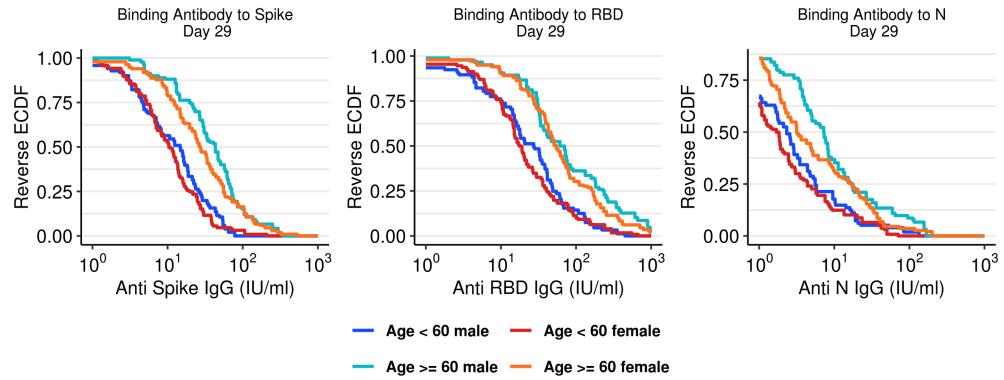


Figure 2.67: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT327



Figure 2.68: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

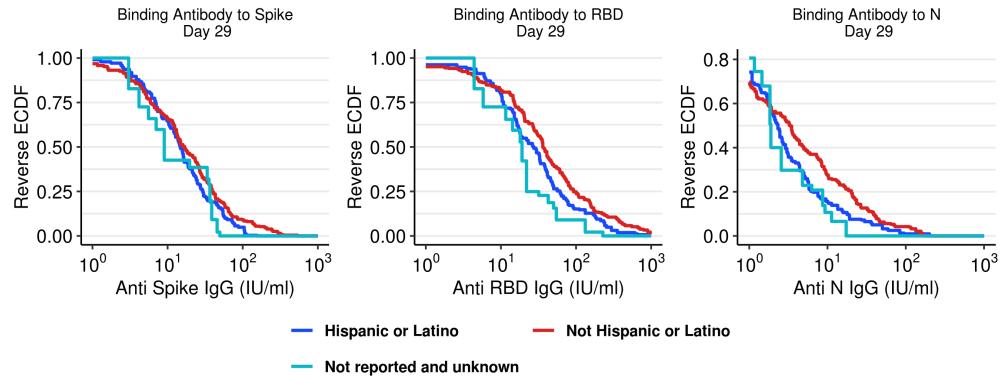


Figure 2.69: RCDF plots for D29 Ab markers: baseline positive vaccine arm by ethnicity.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT329



Figure 2.70: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

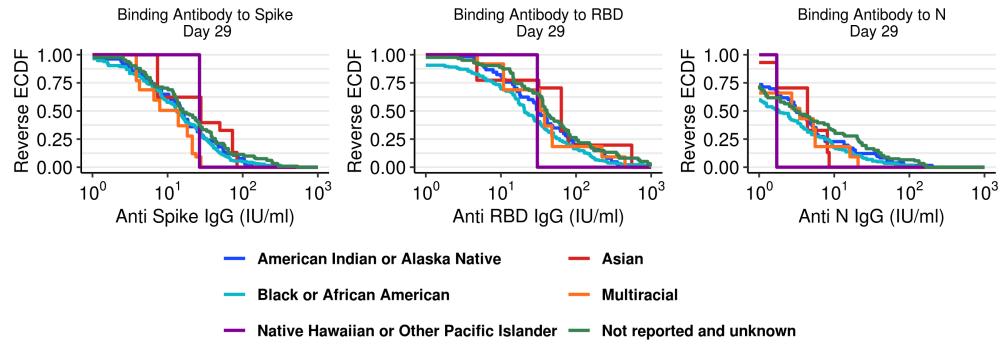


Figure 2.71: RCDF plots for D29 Ab markers: baseline positive vaccine arm by race.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT331



Figure 2.72: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

MOCK



Figure 2.73: RCDF plots for D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT333

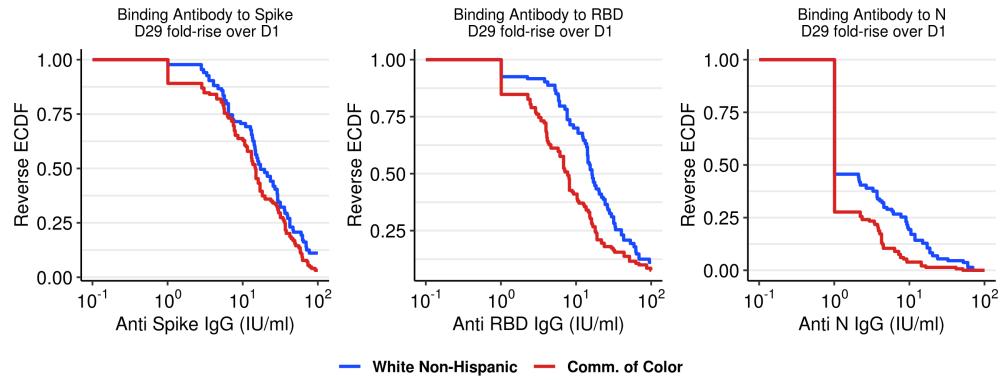


Figure 2.74: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.



Figure 2.75: RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT335

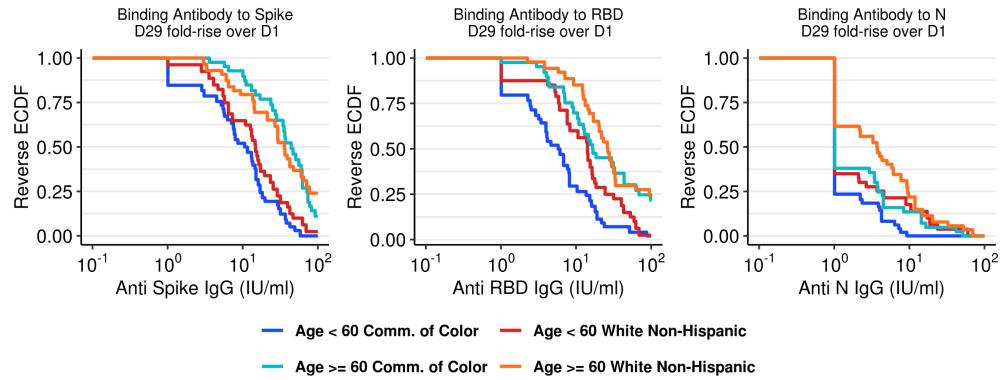


Figure 2.76: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.



Figure 2.77: RCDF plots for D29 Ab markers: baseline positive vaccine arm by country of residence.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT337

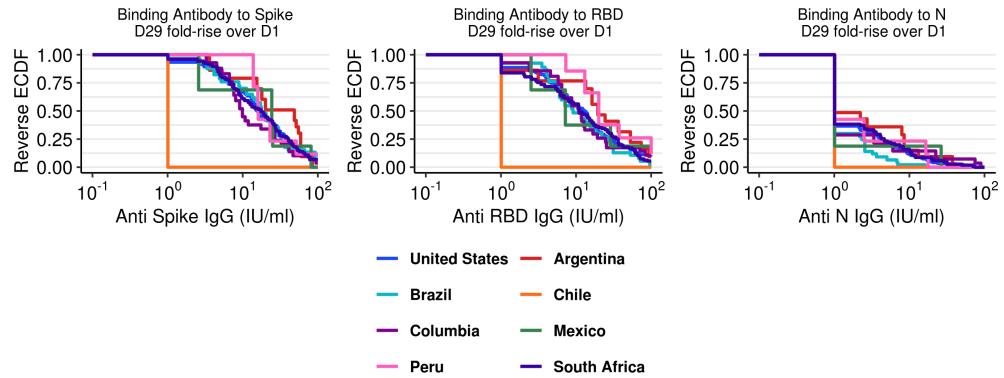


Figure 2.78: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by country of residence.



Figure 2.79: RCDF plots for D29 Ab markers: baseline positive vaccine arm by HIV positivity.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT339



Figure 2.80: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by HIV positivity.

### 2.6.3 Baseline SARS-CoV-2 Positive Placebo Arm



Figure 2.81: RCDF plots for D29 Ab markers: baseline positive placebo arm by age groups.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT341



Figure 2.82: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age groups.



Figure 2.83: RCDF plots for D29 Ab markers: baseline positive placebo arm by high-risk condition.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT343

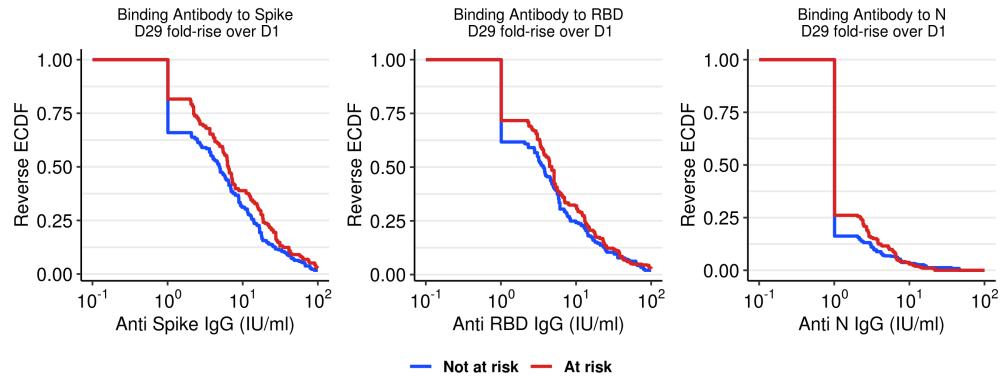


Figure 2.84: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by high-risk condition.

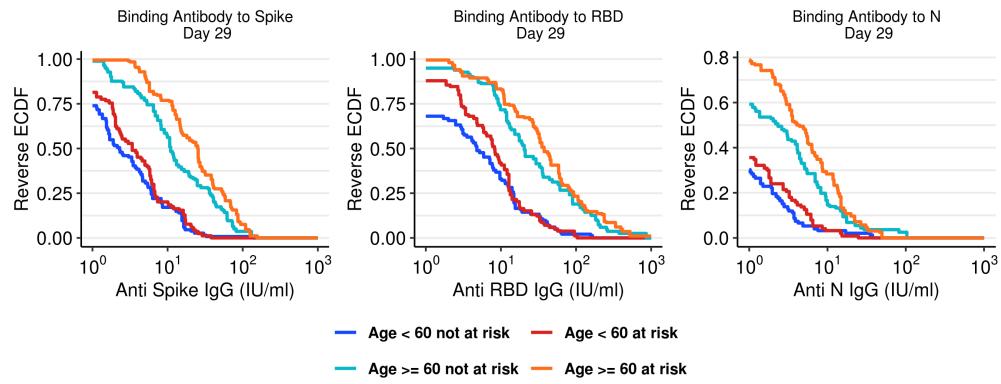


Figure 2.85: RCDF plots for D29 Ab markers: baseline positive placebo arm by age and high-risk condition.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT345



Figure 2.86: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age and high-risk condition.



Figure 2.87: RCDF plots for D29 Ab markers: baseline positive placebo arm by sex assigned at birth.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT347

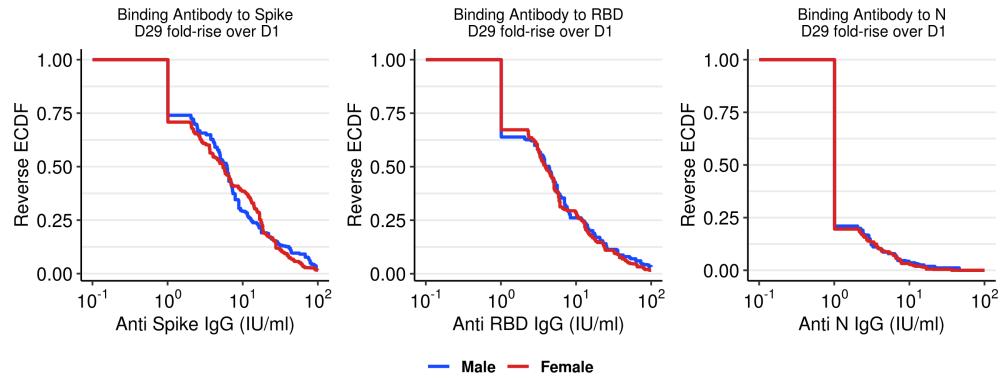


Figure 2.88: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by sex assigned at birth.



Figure 2.89: RCDF plots for D29 Ab markers: baseline positive placebo arm by age and sex assigned at birth.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT349



Figure 2.90: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age and sex assigned at birth.

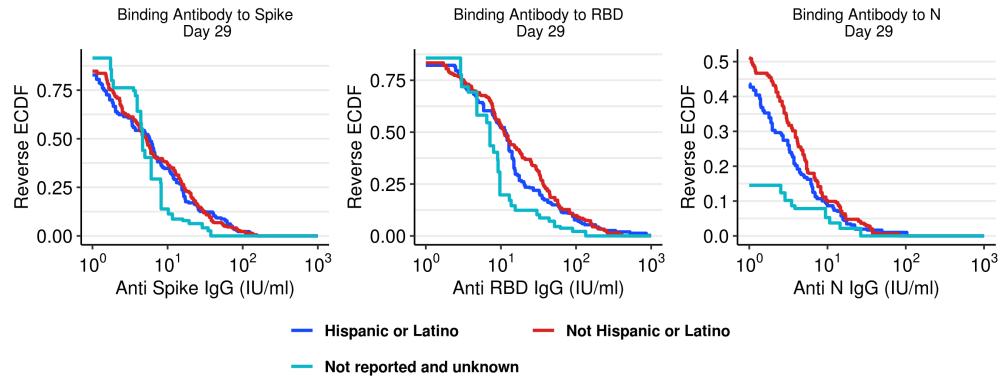


Figure 2.91: RCDF plots for D29 Ab markers: baseline positive placebo arm by ethnicity.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT351



Figure 2.92: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by ethnicity.



Figure 2.93: RCDF plots for D29 Ab markers: baseline positive placebo arm by race.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT353



Figure 2.94: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by race.

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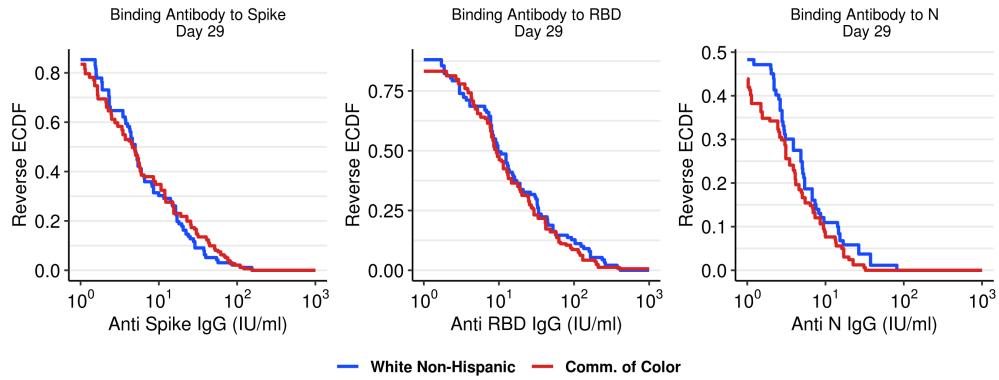


Figure 2.95: RCDF plots for D29 Ab markers: baseline positive placebo arm by dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT355



Figure 2.96: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.

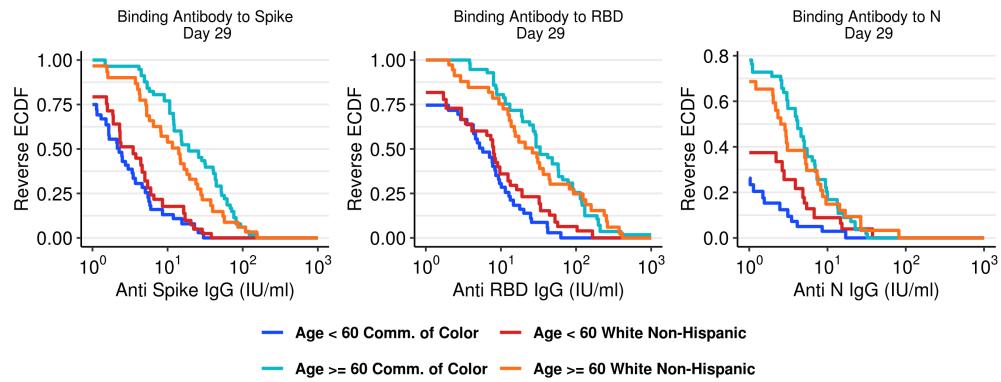


Figure 2.97: RCDF plots for D29 Ab markers: baseline positive placebo arm by age and dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT357



Figure 2.98: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by age and dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.



Figure 2.99: RCDF plots for D29 Ab markers: baseline positive placebo arm by country of residence.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT359



Figure 2.100: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by country of residence.

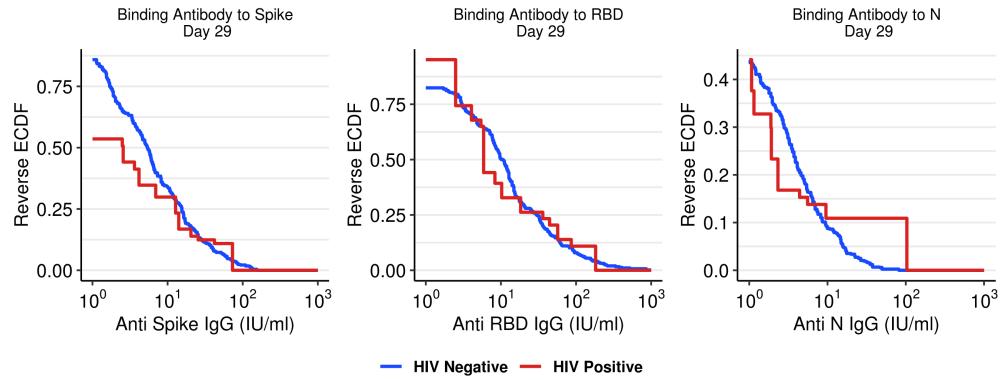


Figure 2.101: RCDF plots for D29 Ab markers: baseline positive placebo arm by HIV positivity.

## 2.6. RCDF PLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT361



Figure 2.102: RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive placebo arm by HIV positivity.

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

### 2.7.1 Baseline SARS-CoV-2 Negative



Figure 2.103: Boxplots of D29 Ab markers: Baseline negative vaccine arm by age group. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT363



Figure 2.104: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age group.

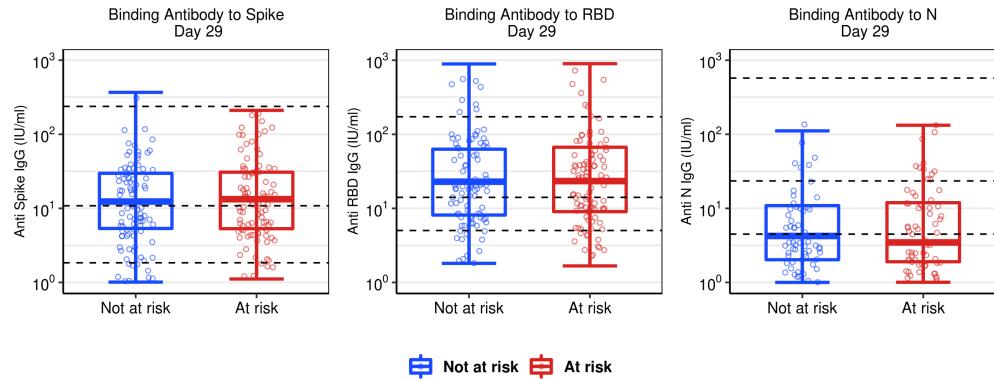


Figure 2.105: Boxplots of D29 Ab markers: Baseline negative vaccine arm by high-risk condition. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT365

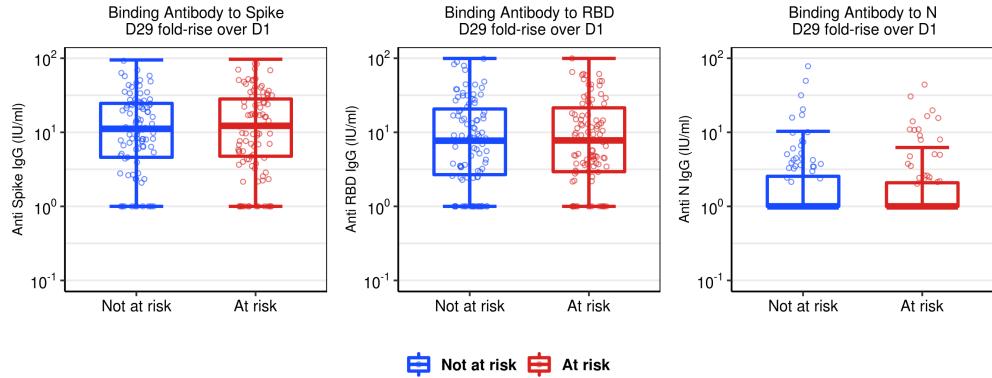


Figure 2.106: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by high-risk condition.



Figure 2.107: Boxplots of D29 Ab markers: Baseline negative vaccine arm by age and high-risk condition. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT367



Figure 2.108: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and high-risk condition.



Figure 2.109: Boxplots of D29 Ab markers: Baseline negative vaccine arm by sex assigned at birth. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT369



Figure 2.110: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by sex assigned at birth.



Figure 2.111: 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, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT371



Figure 2.112: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.



Figure 2.113: Boxplots of D29 Ab markers: Baseline negative vaccine arm by ethnicity. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT373



Figure 2.114: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.



Figure 2.115: Boxplots of D29 Ab markers: Baseline negative vaccine arm by race. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT375



Figure 2.116: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

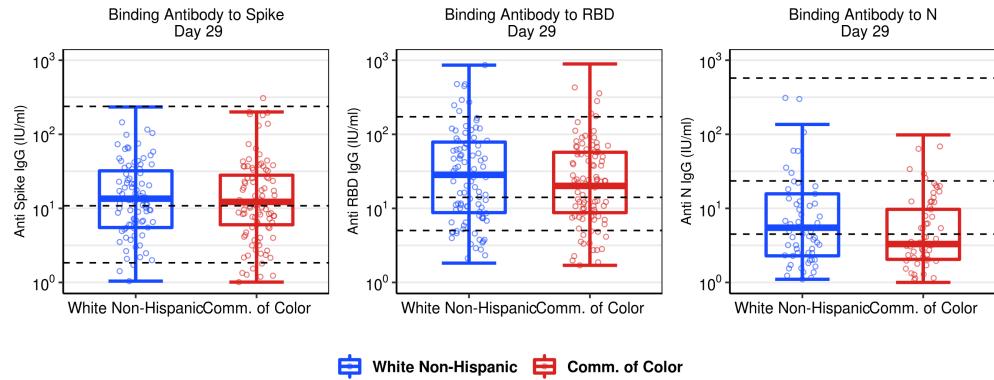


Figure 2.117: Boxplots of D29 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays. These plots are restricted to only United States trial participants.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT377

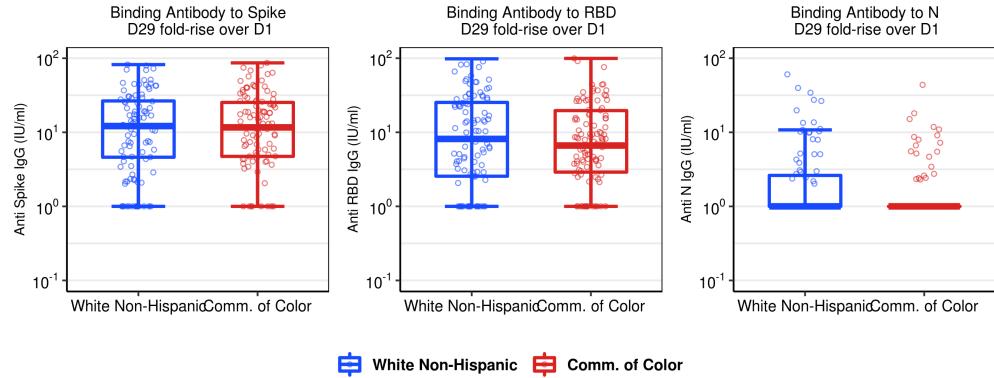


Figure 2.118: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.

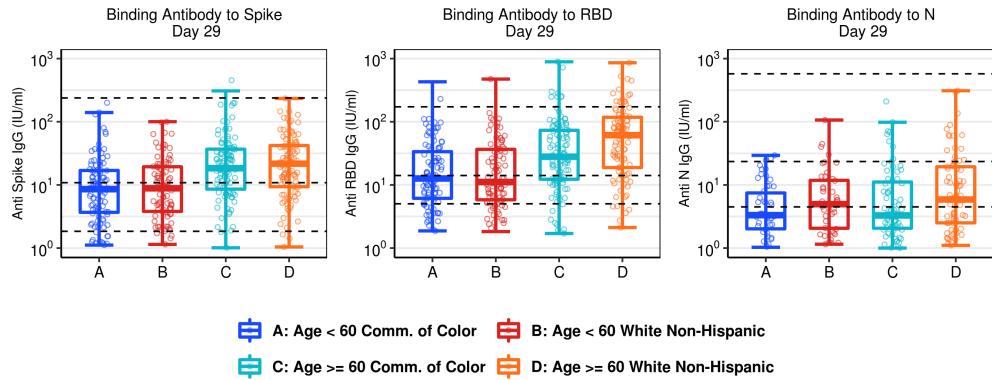


Figure 2.119: Boxplots of D29 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays. These plots are restricted to only United States trial participants.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT379



Figure 2.120: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.

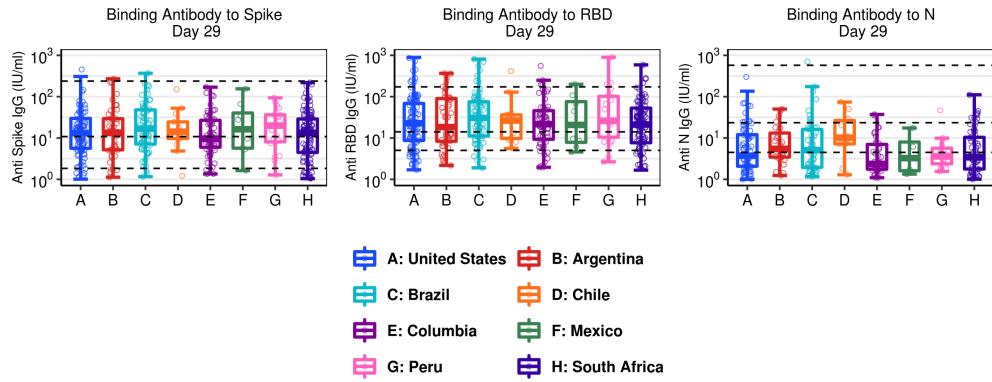


Figure 2.121: Boxplots of D29 Ab markers: Baseline negative vaccine arm by country of residence. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT381



Figure 2.122: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by country of residence.

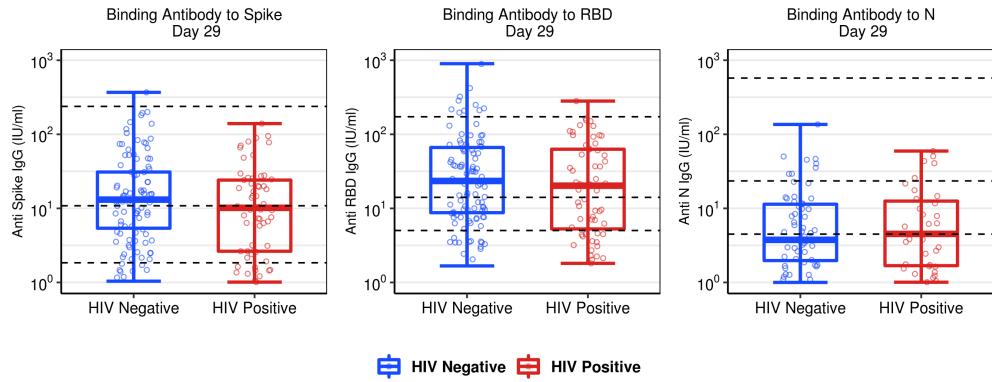


Figure 2.123: Boxplots of D29 Ab markers: Baseline negative vaccine arm by HIV positivity. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT383

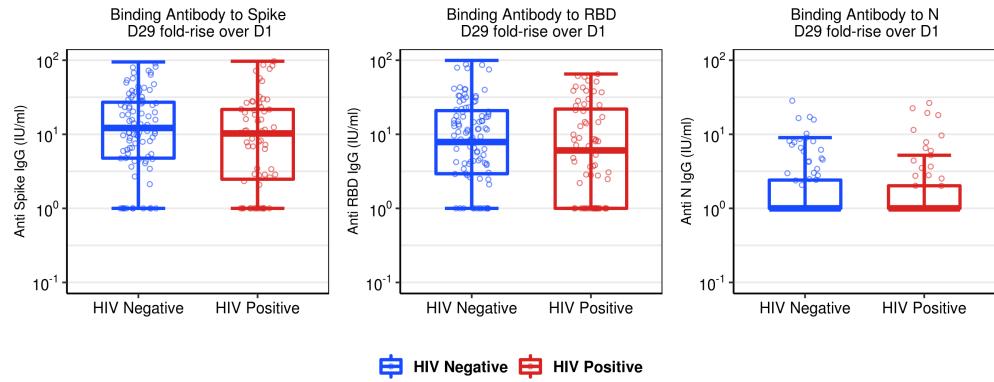


Figure 2.124: Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by HIV positivity.

### 2.7.2 Baseline SARS-CoV-2 Positive



Figure 2.125: Boxplots of D29 Ab markers: baseline positive vaccine arm by age group. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT385



Figure 2.126: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

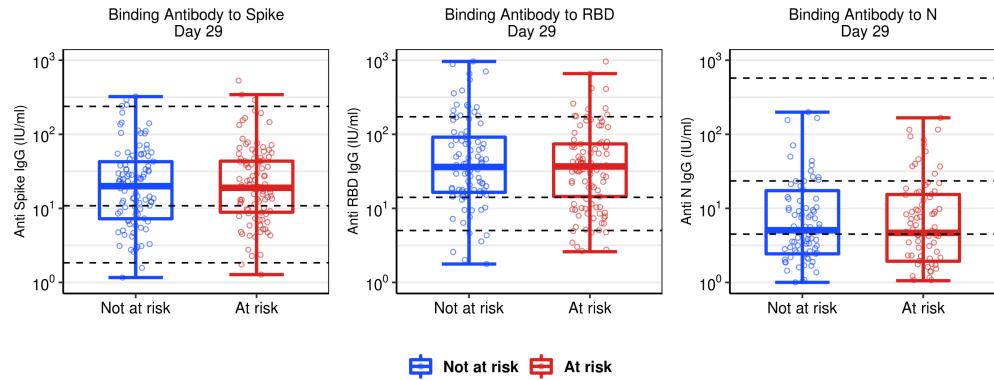


Figure 2.127: Boxplots of D29 Ab markers: baseline positive vaccine arm by high-risk condition. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT387

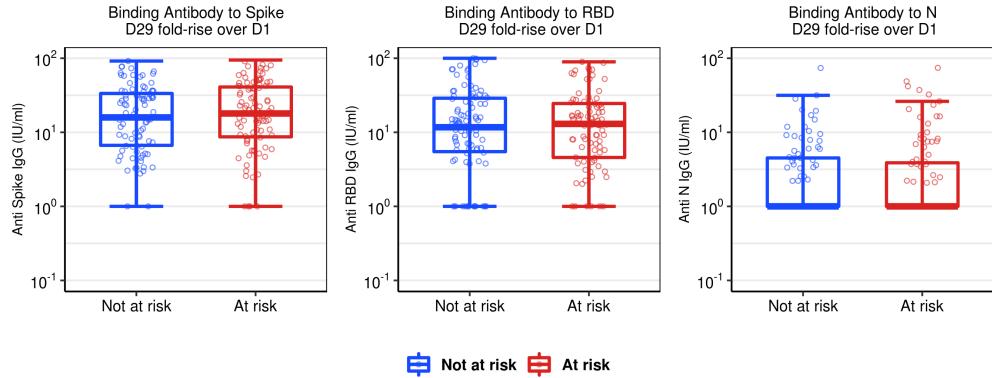


Figure 2.128: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.



Figure 2.129: Boxplots of D29 Ab markers: baseline positive vaccine arm by age and high-risk condition. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT389

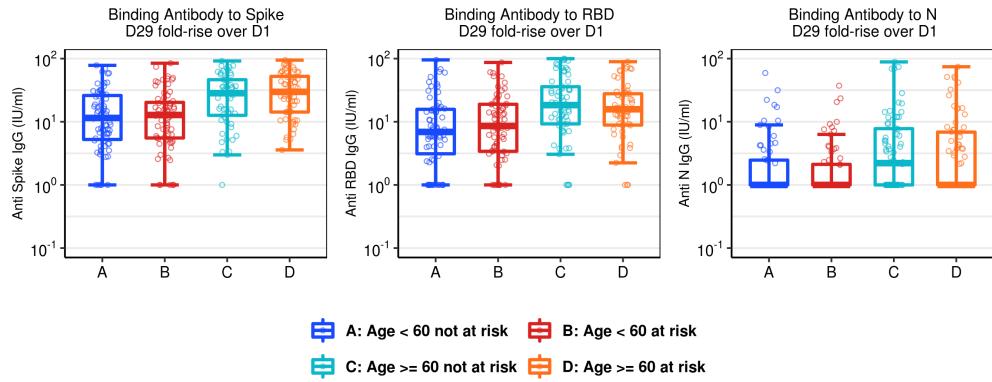


Figure 2.130: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

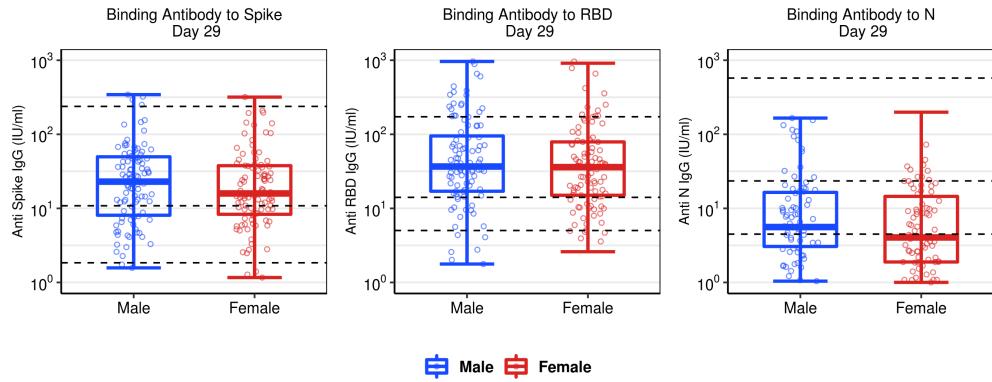


Figure 2.131: Boxplots of D29 Ab markers: baseline positive vaccine arm by sex assigned at birth. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT391

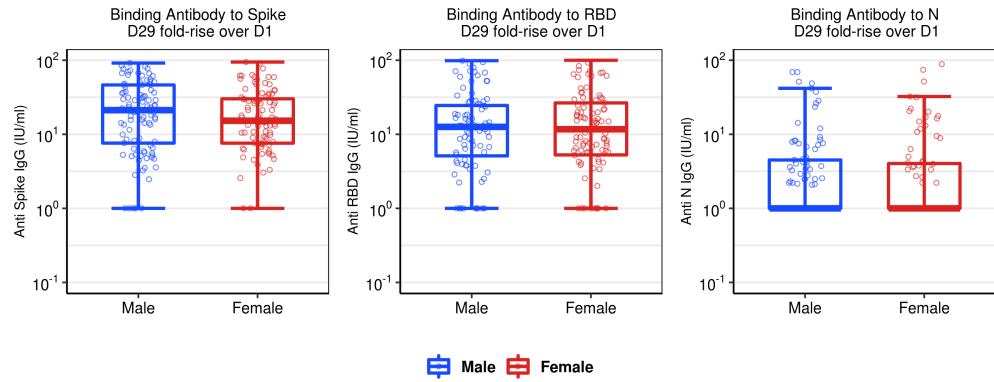


Figure 2.132: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.



Figure 2.133: 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, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT393



Figure 2.134: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

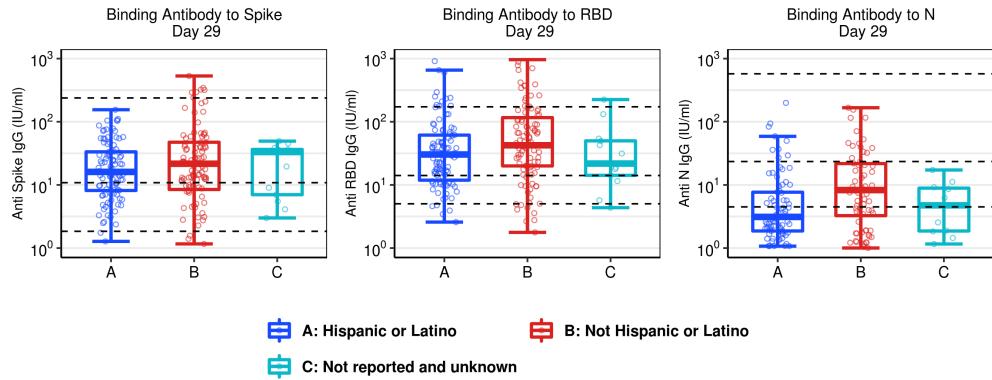


Figure 2.135: Boxplots of D29 Ab markers: baseline positive vaccine arm by ethnicity The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT395



Figure 2.136: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

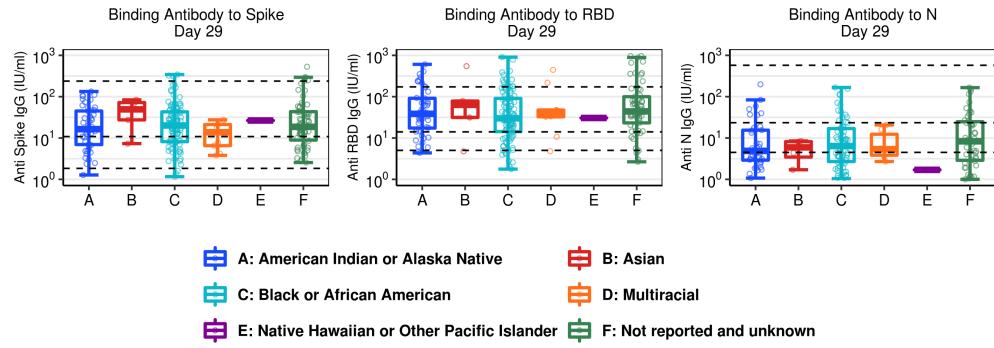


Figure 2.137: Boxplots of D29 Ab markers: baseline positive vaccine arm by race. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT397

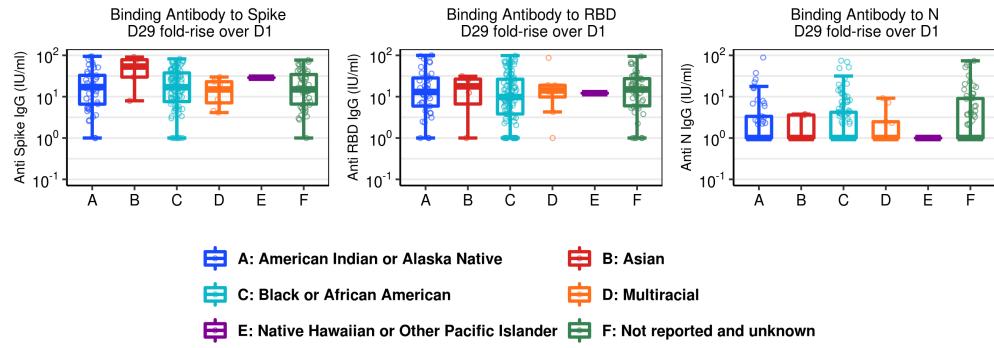


Figure 2.138: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

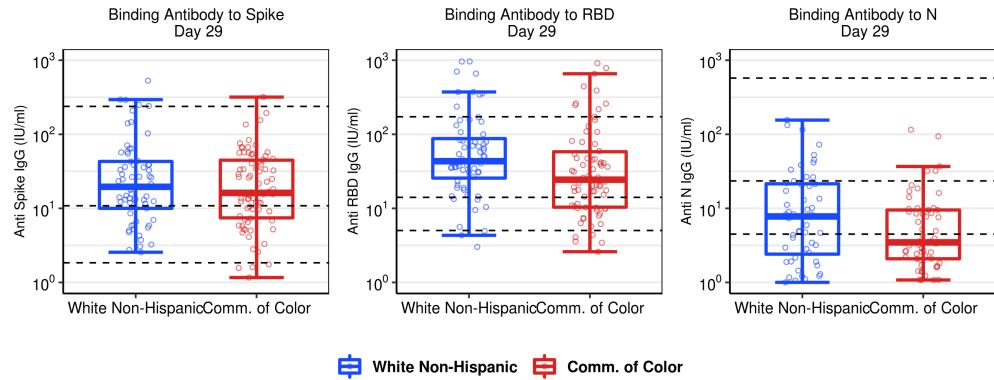


Figure 2.139: Boxplots of D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays. These plots are restricted to only United States trial participants.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT399

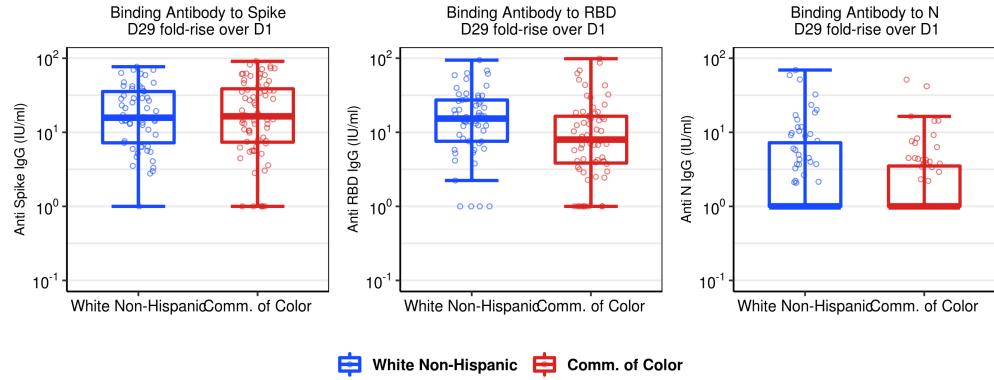


Figure 2.140: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.

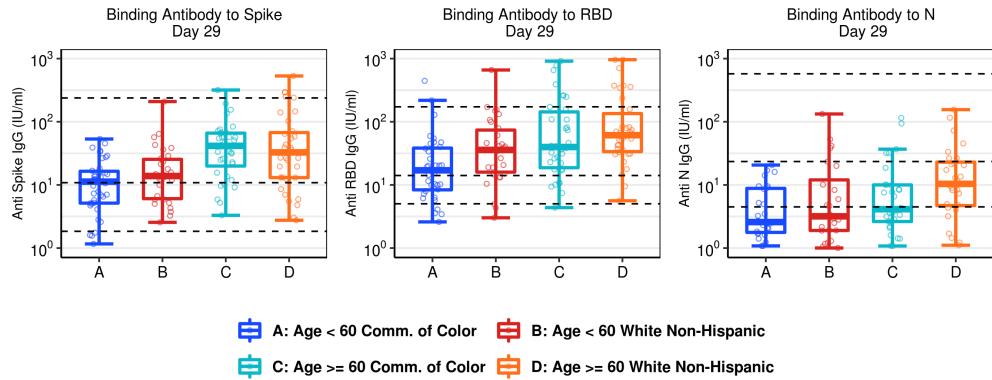


Figure 2.141: Boxplots of D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays. These plots are restricted to only United States trial participants.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT401

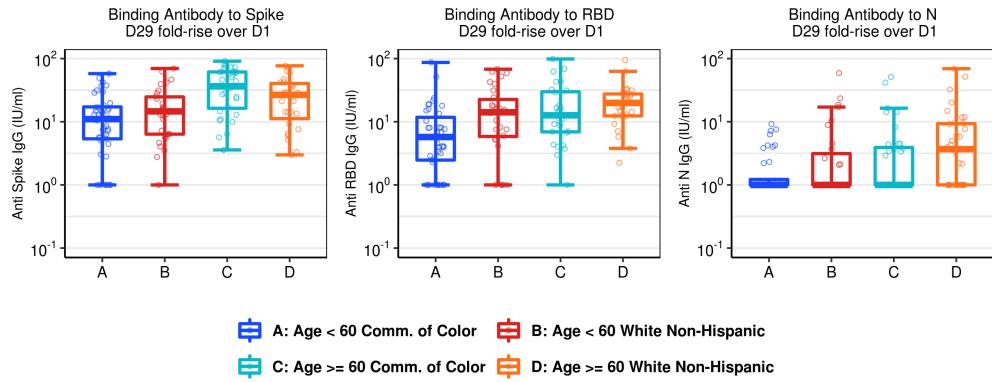


Figure 2.142: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group. These plots are restricted to only United States trial participants.



Figure 2.143: Boxplots of D29 Ab markers: baseline positive vaccine arm by country of residence. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT403



Figure 2.144: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by country of residence.

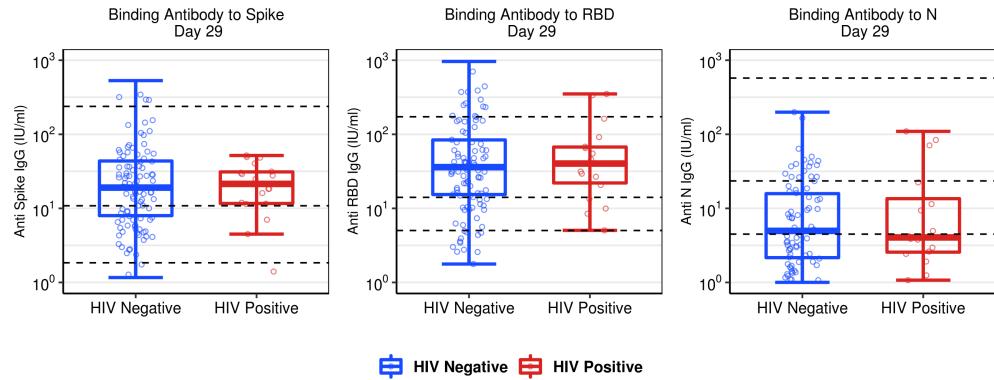


Figure 2.145: Boxplots of D29 Ab markers: baseline positive vaccine arm by HIV positivity. The three dashed lines in each figure are ULOQ, positivity cut-off, LLOQ from top to bottom for binding antibody assays.

## 2.7. BOXPLOTS OF ANTIBODY MARKERS BY DEMOGRAPHICS FOR PER-PROTOCOL COHORT405



Figure 2.146: Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by HIV positivity.

MOCK

# Chapter 3

## Appendix

- This report was built from the [CoVPN/correlates\\_reporting](#) repository with commit hash 5fe0992e1e4c2efc26cd4a86e34773c3c99630b5. A diff of the changes introduced by that commit may be viewed at [https://github.com/CoVPN/correlates\\_reporting/commit/5fe0992e1e4c2efc26cd4a86e34773c3c99630b5](https://github.com/CoVPN/correlates_reporting/commit/5fe0992e1e4c2efc26cd4a86e34773c3c99630b5)
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- The sha256 hash sum of the processed file, “janssen\_pooled\_mock\_data\_processed.csv”: 5d6af1d6b6307d64f61e32e01a297faedb5e41c17bcedb7807f46f4f8200c75