COVID-19 Correlates Immunogenicity Analysis Report

COVID-19 Prevention Network (CoVPN) Biostatistics Team

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Chapter 1

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Figure 1.117: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

Figure 1.118: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

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

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

Figure 1.121: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

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

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

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

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

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

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

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

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

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

Figure 1.131: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Figure 1.149: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

Figure 1.150: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

Chapter 2

Tabular Description of Immunogenicity Data

Table 1. Demographic

Characteristics

Placebo (N = 425)

Vaccine (N = 1177)

Total (N = 1602)

Age

Age < 65

228 (53.6%)

577 (49.0%)

805 (50.2%)

Age >= 65

197 (46.4%)

600 (51.0%)

797 (49.8%)

Mean (Range)

56.6 (18.0, 85.0)

58.2 (18.0, 85.0)

57.8 (18.0, 85.0)

BMI

Mean +/- SD

29.8 +/- 7.5

29.9 +/- 7.1

29.9 +/- 7.2

Sex

Female

234 (55.1%)

660 (56.1%)

894 (55.8%)

Male

191 (44.9%)

517 (43.9%)

708 (44.2%)

Race

White Non-Hispanic

178 (41.9%)

501 (42.6%)

679 (42.4%)

Black or African American

84 (19.8%)

223 (18.9%)

307 (19.2%)

White

37 (8.7%)

91 (7.7%)

128 (8.0%)

Not reported and unknown

35 (8.2%)

111 (9.4%)

146 (9.1%)

Asian

33 (7.8%)

96 (8.2%)

129 (8.1%)

Multiracial

24 (5.6%)

66 (5.6%)

90 (5.6%)

Other

14 (3.3%)

38 (3.2%)

52 (3.2%)

American Indian or Alaska Native

13 (3.1%)

31 (2.6%)

44 (2.7%)

Native Hawaiian or Other Pacific Islander

7 (1.6%)

20 (1.7%)

27 (1.7%)

Hispanic or Latino ethnicity

Not Hispanic or Latino

317 (74.6%)

931 (79.1%)

1248 (77.9%)

Hispanic or Latino

65 (15.3%)

150 (12.7%)

215 (13.4%)

Not reported and unknown

43 (10.1%)

96 (8.2%)

139 (8.7%)

Risk for Severe Covid-19

Not at-risk

227 (53.4%)

591 (50.2%)

818 (51.1%)

At-risk

198 (46.6%)

586 (49.8%)

784 (48.9%)

This table summarises the case-cohort, which measures antibody markers at (Day 1, Day 29, and Day 57).

Table 2a. Percentage of responders, and participants with concentrations >= 2 x LLOD or >= 4 x LLOD for binding antibody markers by All participants

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% Greater than 2xLLOD

% Greater than 4xLLOD

All participants

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12403.4/12410.2 = 99.9%(99.6%, 100.0%)

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1334/1337.3 = 99.8%(98.2%, 100.0%)

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1334/1337.3 = 99.8%(98.2%, 100.0%)

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

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

Table 2b. Percentage of responders, and participants with concentrations >= 2 x LLOD or >= 4 x LLOD for binding antibody markers by Age

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% Greater than 2xLLOD

% Greater than 4xLLOD

Age

Age < 65

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

432

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9745.8/9752.5 = 99.9%(99.5%, 100.0%)

Age < 65

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

432

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

Age < 65

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

432

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

Age < 65

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

145

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

Age < 65

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

145

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

Age < 65

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

145

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

Age < 65

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

79

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

Age < 65

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

79

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

Age < 65

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

79

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

Age < 65

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

149

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1063/1066.3 = 99.7%(97.8%, 100.0%)

Age < 65

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

149

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1063/1066.3 = 99.7%(97.8%, 100.0%)

Age < 65

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

149

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

Age < 65

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

432

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

Age < 65

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

432

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

Age < 65

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

432

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

9752.5/9752.5 = 100.0%(100.0%, 100.0%)

Age < 65

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

145

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

Age < 65

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

145

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

Age < 65

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

145

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

1132.2/1132.2 = 100.0%(100.0%, 100.0%)

Age < 65

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

79

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

Age < 65

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

79

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

Age < 65

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

79

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

Age < 65

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

149

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

Age < 65

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

149

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

Age < 65

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

149

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

1066.3/1066.3 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

472

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

472

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

472

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

128

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

128

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

128

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

76

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

Age >= 65

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

76

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

Age >= 65

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

76

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

Age >= 65

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

121

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

121

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

121

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

472

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

472

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

472

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

2657.6/2657.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

128

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

128

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

128

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

76

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

Age >= 65

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

76

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

Age >= 65

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

76

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

Age >= 65

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

121

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

121

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

121

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

271/271 = 100.0%(100.0%, 100.0%)

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

Table 2c. Percentage of responders, and participants with concentrations >= 2 x LLOD or >= 4 x LLOD for binding antibody markers by Risk for Severe Covid-19

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% Greater than 2xLLOD

% Greater than 4xLLOD

Risk for Severe Covid-19

At-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

460

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3341.6/3348.4 = 99.8%(98.6%, 100.0%)

At-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

460

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

At-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

460

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

At-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

126

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

At-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

126

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

At-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

126

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

At-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

78

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

At-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

78

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

At-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

78

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

At-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

120

314.6/314.6 = 100.0%(100.0%, 100.0%)

314.6/314.6 = 100.0%(100.0%, 100.0%)

311.3/314.6 = 98.9%(92.7%, 99.9%)

At-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

120

314.6/314.6 = 100.0%(100.0%, 100.0%)

314.6/314.6 = 100.0%(100.0%, 100.0%)

311.3/314.6 = 98.9%(92.7%, 99.9%)

At-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

120

314.6/314.6 = 100.0%(100.0%, 100.0%)

314.6/314.6 = 100.0%(100.0%, 100.0%)

314.6/314.6 = 100.0%(100.0%, 100.0%)

At-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

460

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

At-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

460

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

At-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

460

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

3348.4/3348.4 = 100.0%(100.0%, 100.0%)

At-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

126

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

At-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

126

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

At-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

126

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

359.5/359.5 = 100.0%(100.0%, 100.0%)

At-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

78

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

At-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

78

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

At-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

78

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

At-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

120

314.6/314.6 = 100.0%(100.0%, 100.0%)

314.6/314.6 = 100.0%(100.0%, 100.0%)

314.6/314.6 = 100.0%(100.0%, 100.0%)

At-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

120

314.6/314.6 = 100.0%(100.0%, 100.0%)

314.6/314.6 = 100.0%(100.0%, 100.0%)

314.6/314.6 = 100.0%(100.0%, 100.0%)

At-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

120

314.6/314.6 = 100.0%(100.0%, 100.0%)

314.6/314.6 = 100.0%(100.0%, 100.0%)

314.6/314.6 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

444

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

444

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

444

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

147

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

147

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

147

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

77

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

Not at-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

77

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

Not at-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

77

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

Not at-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

150

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

150

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

150

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

444

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

444

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

444

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

9061.8/9061.8 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

147

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

147

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

147

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

77

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

Not at-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

77

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

Not at-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

77

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

Not at-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

150

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

150

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

Not at-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

150

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

1022.7/1022.7 = 100.0%(100.0%, 100.0%)

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

Table 2d. Percentage of responders, and participants with concentrations >= 2 x LLOD or >= 4 x LLOD for binding antibody markers by Age, Risk for Severe Covid-19

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% Greater than 2xLLOD

% Greater than 4xLLOD

Age, Risk for Severe Covid-19

Age < 65 At-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

216

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1986.5/1993.3 = 99.7%(97.6%, 100.0%)

Age < 65 At-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

73

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

73

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

73

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

39

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

Age < 65 At-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

39

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

Age < 65 At-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

39

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

Age < 65 At-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

75

211.7/211.7 = 100.0%(100.0%, 100.0%)

211.7/211.7 = 100.0%(100.0%, 100.0%)

208.4/211.7 = 98.4%(89.2%, 99.8%)

Age < 65 At-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

75

211.7/211.7 = 100.0%(100.0%, 100.0%)

211.7/211.7 = 100.0%(100.0%, 100.0%)

208.4/211.7 = 98.4%(89.2%, 99.8%)

Age < 65 At-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

75

211.7/211.7 = 100.0%(100.0%, 100.0%)

211.7/211.7 = 100.0%(100.0%, 100.0%)

211.7/211.7 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

216

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

1993.3/1993.3 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

73

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

73

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

73

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

240/240 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

39

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

Age < 65 At-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

39

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

Age < 65 At-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

39

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

Age < 65 At-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

75

211.7/211.7 = 100.0%(100.0%, 100.0%)

211.7/211.7 = 100.0%(100.0%, 100.0%)

211.7/211.7 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

75

211.7/211.7 = 100.0%(100.0%, 100.0%)

211.7/211.7 = 100.0%(100.0%, 100.0%)

211.7/211.7 = 100.0%(100.0%, 100.0%)

Age < 65 At-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

75

211.7/211.7 = 100.0%(100.0%, 100.0%)

211.7/211.7 = 100.0%(100.0%, 100.0%)

211.7/211.7 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

216

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

72

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

40

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

Age < 65 Not at-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

40

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

Age < 65 Not at-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

40

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

Age < 65 Not at-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

74

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

74

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

74

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

216

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

7759.3/7759.3 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

72

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

40

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

Age < 65 Not at-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

40

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

Age < 65 Not at-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

40

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

Age < 65 Not at-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

74

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

74

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

Age < 65 Not at-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

74

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

854.6/854.6 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

244

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

244

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

244

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

53

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

53

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

53

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

39

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

Age >= 65 At-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

39

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

Age >= 65 At-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

39

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

Age >= 65 At-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

45

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

45

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

45

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

244

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

244

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

244

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

1355.1/1355.1 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

53

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

53

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

53

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

39

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

Age >= 65 At-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

39

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

Age >= 65 At-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

39

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

Age >= 65 At-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

45

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

45

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

45

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

228

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

228

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

228

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

75

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

75

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

75

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

37

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

Age >= 65 Not at-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

37

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

Age >= 65 Not at-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

37

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

Age >= 65 Not at-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

76

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

76

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

76

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

228

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

228

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

228

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

75

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

75

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

75

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

37

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

Age >= 65 Not at-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

37

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

Age >= 65 Not at-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

37

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

Age >= 65 Not at-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

76

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

76

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

76

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

168.1/168.1 = 100.0%(100.0%, 100.0%)

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

Table 2e. Percentage of responders, and participants with concentrations >= 2 x LLOD or >= 4 x LLOD for binding antibody markers by Sex

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% Greater than 2xLLOD

% Greater than 4xLLOD

Sex

Female

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

511

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6951.5/6958.3 = 99.9%(99.3%, 100.0%)

Female

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

511

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

Female

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

511

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

Female

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

149

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

Female

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

149

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

Female

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

149

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

Female

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

85

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

Female

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

85

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

Female

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

85

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

Female

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

149

800.5/800.5 = 100.0%(100.0%, 100.0%)

800.5/800.5 = 100.0%(100.0%, 100.0%)

797.2/800.5 = 99.6%(97.1%, 99.9%)

Female

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

149

800.5/800.5 = 100.0%(100.0%, 100.0%)

800.5/800.5 = 100.0%(100.0%, 100.0%)

797.2/800.5 = 99.6%(97.1%, 99.9%)

Female

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

149

800.5/800.5 = 100.0%(100.0%, 100.0%)

800.5/800.5 = 100.0%(100.0%, 100.0%)

800.5/800.5 = 100.0%(100.0%, 100.0%)

Female

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

511

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

Female

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

511

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

Female

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

511

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

6958.3/6958.3 = 100.0%(100.0%, 100.0%)

Female

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

149

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

Female

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

149

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

Female

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

149

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

763.9/763.9 = 100.0%(100.0%, 100.0%)

Female

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

85

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

Female

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

85

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

Female

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

85

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

Female

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

149

800.5/800.5 = 100.0%(100.0%, 100.0%)

800.5/800.5 = 100.0%(100.0%, 100.0%)

800.5/800.5 = 100.0%(100.0%, 100.0%)

Female

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

149

800.5/800.5 = 100.0%(100.0%, 100.0%)

800.5/800.5 = 100.0%(100.0%, 100.0%)

800.5/800.5 = 100.0%(100.0%, 100.0%)

Female

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

149

800.5/800.5 = 100.0%(100.0%, 100.0%)

800.5/800.5 = 100.0%(100.0%, 100.0%)

800.5/800.5 = 100.0%(100.0%, 100.0%)

Male

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

393

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

Male

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

393

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

Male

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

393

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

Male

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

124

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

Male

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

124

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

Male

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

124

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

Male

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

70

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

Male

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

70

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

Male

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

70

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

Male

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

121

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

Male

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

121

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

Male

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

121

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

Male

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

393

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

Male

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

393

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

Male

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

393

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

5451.9/5451.9 = 100.0%(100.0%, 100.0%)

Male

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

124

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

Male

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

124

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

Male

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

124

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

Male

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

70

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

Male

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

70

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

Male

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

70

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

Male

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

121

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

Male

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

121

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

Male

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

121

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

536.8/536.8 = 100.0%(100.0%, 100.0%)

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

Table 2f. Percentage of responders, and participants with concentrations >= 2 x LLOD or >= 4 x LLOD for binding antibody markers by Age, sex

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% Greater than 2xLLOD

% Greater than 4xLLOD

Age, sex

Age < 65 Female

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

245

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5472.2/5478.9 = 99.9%(99.1%, 100.0%)

Age < 65 Female

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

245

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

245

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

77

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

77

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

77

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

45

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

Age < 65 Female

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

45

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

Age < 65 Female

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

45

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

Age < 65 Female

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

89

667/667 = 100.0%(100.0%, 100.0%)

667/667 = 100.0%(100.0%, 100.0%)

663.7/667 = 99.5%(96.4%, 99.9%)

Age < 65 Female

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

89

667/667 = 100.0%(100.0%, 100.0%)

667/667 = 100.0%(100.0%, 100.0%)

663.7/667 = 99.5%(96.4%, 99.9%)

Age < 65 Female

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

89

667/667 = 100.0%(100.0%, 100.0%)

667/667 = 100.0%(100.0%, 100.0%)

667/667 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

245

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

245

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

245

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

5478.9/5478.9 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

77

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

77

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

77

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

603.5/603.5 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

45

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

Age < 65 Female

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

45

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

Age < 65 Female

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

45

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

Age < 65 Female

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

89

667/667 = 100.0%(100.0%, 100.0%)

667/667 = 100.0%(100.0%, 100.0%)

667/667 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

89

667/667 = 100.0%(100.0%, 100.0%)

667/667 = 100.0%(100.0%, 100.0%)

667/667 = 100.0%(100.0%, 100.0%)

Age < 65 Female

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

89

667/667 = 100.0%(100.0%, 100.0%)

667/667 = 100.0%(100.0%, 100.0%)

667/667 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

187

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

187

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

187

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

68

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

68

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

68

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

34

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

Age < 65 Male

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

34

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

Age < 65 Male

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

34

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

Age < 65 Male

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

60

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

60

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

60

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

187

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

187

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

187

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

4273.6/4273.6 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

68

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

68

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

68

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

34

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

Age < 65 Male

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

34

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

Age < 65 Male

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

34

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

Age < 65 Male

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

60

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

60

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

Age < 65 Male

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

60

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

399.3/399.3 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

266

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

266

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

266

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

72

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

40

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

Age >= 65 Female

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

40

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

Age >= 65 Female

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

40

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

Age >= 65 Female

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

60

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

60

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

60

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

266

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

266

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

266

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

72

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

40

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

Age >= 65 Female

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

40

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

Age >= 65 Female

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

40

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

Age >= 65 Female

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

60

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

60

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

60

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

206

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

206

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

206

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

56

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

36

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

Age >= 65 Male

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

36

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

Age >= 65 Male

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

36

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

Age >= 65 Male

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

61

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

61

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

61

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

206

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

206

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

206

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

1178.3/1178.3 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

56

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

36

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

Age >= 65 Male

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

36

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

Age >= 65 Male

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

36

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

Age >= 65 Male

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

61

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

61

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

61

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

137.5/137.5 = 100.0%(100.0%, 100.0%)

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

Table 2g. Percentage of responders, and participants with concentrations >= 2 x LLOD or >= 4 x LLOD for binding antibody markers by Hispanic or Latino ethnicity

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% Greater than 2xLLOD

% Greater than 4xLLOD

Hispanic or Latino ethnicity

Hispanic or Latino

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

112

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

112

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

112

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

38

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

38

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

38

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

20

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

Hispanic or Latino

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

20

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

Hispanic or Latino

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

20

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

Hispanic or Latino

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

45

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

45

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

45

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

112

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

112

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

112

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

38

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

38

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

38

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

20

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

Hispanic or Latino

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

20

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

Hispanic or Latino

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

20

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

Hispanic or Latino

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

45

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

45

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

45

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

723

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10406.4/10413.1 = 99.9%(99.5%, 100.0%)

Not Hispanic or Latino

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

723

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

723

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

208

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

208

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

208

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

119

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

Not Hispanic or Latino

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

119

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

Not Hispanic or Latino

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

119

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

Not Hispanic or Latino

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

198

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1013.2/1016.5 = 99.7%(97.7%, 100.0%)

Not Hispanic or Latino

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

198

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1013.2/1016.5 = 99.7%(97.7%, 100.0%)

Not Hispanic or Latino

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

198

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

723

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

723

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

723

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

10413.1/10413.1 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

208

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

208

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

208

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

1083.5/1083.5 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

119

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

Not Hispanic or Latino

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

119

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

Not Hispanic or Latino

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

119

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

Not Hispanic or Latino

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

198

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

198

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

Not Hispanic or Latino

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

198

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

1016.5/1016.5 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

69

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

69

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

69

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

27

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

27

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

27

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

16

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

16

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

16

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

27

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

27

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

27

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

69

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

69

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

69

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

27

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

27

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

27

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

16

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

16

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

16

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

27

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

27

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

27

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

154.1/154.1 = 100.0%(100.0%, 100.0%)

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

Table 2h. Percentage of responders, and participants with concentrations >= 2 x LLOD or >= 4 x LLOD for binding antibody markers by Race

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% Greater than 2xLLOD

% Greater than 4xLLOD

Race

Not reported and unknown

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

82

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

82

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

82

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

29

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

29

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

29

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

16

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

16

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

16

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

19

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

19

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

19

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

82

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

82

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

82

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

1261.1/1261.1 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

29

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

29

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

29

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

16

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

16

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

16

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

19

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

19

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

19

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

23

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

23

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

23

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

8

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

8

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

8

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

4

0/59.5 = 0.0%

0/59.5 = 0.0%

0/59.5 = 0.0%

American Indian or Alaska Native

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

4

0/59.5 = 0.0%

0/59.5 = 0.0%

0/59.5 = 0.0%

American Indian or Alaska Native

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

4

0/59.5 = 0.0%

0/59.5 = 0.0%

0/59.5 = 0.0%

American Indian or Alaska Native

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

9

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

9

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

9

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

23

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

23

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

23

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

8

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

8

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

8

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

4

0/59.5 = 0.0%

0/59.5 = 0.0%

0/59.5 = 0.0%

American Indian or Alaska Native

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

4

0/59.5 = 0.0%

0/59.5 = 0.0%

0/59.5 = 0.0%

American Indian or Alaska Native

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

4

0/59.5 = 0.0%

0/59.5 = 0.0%

0/59.5 = 0.0%

American Indian or Alaska Native

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

9

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

9

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

9

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

Asian

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

72

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

Asian

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

72

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

Asian

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

72

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

Asian

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

24

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

Asian

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

24

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

Asian

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

24

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

Asian

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

11

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

Asian

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

11

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

Asian

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

11

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

Asian

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

22

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

Asian

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

22

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

Asian

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

22

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

Asian

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

72

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

Asian

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

72

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

Asian

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

72

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

Asian

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

24

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

Asian

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

24

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

Asian

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

24

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

Asian

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

11

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

Asian

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

11

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

Asian

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

11

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

Asian

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

22

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

Asian

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

22

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

Asian

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

22

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

Black or African American

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

186

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

Black or African American

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

186

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

Black or African American

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

186

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

Black or African American

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

37

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

Black or African American

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

37

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

Black or African American

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

37

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

Black or African American

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

30

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

Black or African American

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

30

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

Black or African American

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

30

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

Black or African American

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

54

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

Black or African American

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

54

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

Black or African American

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

54

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

Black or African American

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

186

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

Black or African American

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

186

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

Black or African American

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

186

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

1902.4/1902.4 = 100.0%(100.0%, 100.0%)

Black or African American

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

37

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

Black or African American

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

37

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

Black or African American

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

37

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

Black or African American

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

30

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

Black or African American

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

30

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

Black or African American

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

30

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

Black or African American

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

54

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

Black or African American

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

54

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

Black or African American

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

54

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

189.9/189.9 = 100.0%(100.0%, 100.0%)

Multiracial

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

50

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

Multiracial

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

50

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

Multiracial

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

50

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

Multiracial

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

16

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

16

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

16

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

12

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

Multiracial

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

12

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

Multiracial

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

12

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

Multiracial

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

12

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

12

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

12

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

50

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

50

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

50

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

16

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

16

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

16

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

12

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

Multiracial

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

12

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

Multiracial

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

12

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

Multiracial

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

12

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

12

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

12

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

17

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

17

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

17

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

3

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

3

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

3

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

3

0/22 = 0.0%

0/22 = 0.0%

0/22 = 0.0%

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

3

0/22 = 0.0%

0/22 = 0.0%

0/22 = 0.0%

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

3

0/22 = 0.0%

0/22 = 0.0%

0/22 = 0.0%

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

4

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

4

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

4

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

17

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

17

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

17

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

3

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

3

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

3

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

3

0/22 = 0.0%

0/22 = 0.0%

0/22 = 0.0%

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

3

0/22 = 0.0%

0/22 = 0.0%

0/22 = 0.0%

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

3

0/22 = 0.0%

0/22 = 0.0%

0/22 = 0.0%

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

4

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

4

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

4

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

Other

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

26

215.2/215.2 = 100.0%(100.0%, 100.0%)

215.2/215.2 = 100.0%(100.0%, 100.0%)

208.4/215.2 = 96.8%(78.4%, 99.6%)

Other

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

26

215.2/215.2 = 100.0%(100.0%, 100.0%)

215.2/215.2 = 100.0%(100.0%, 100.0%)

215.2/215.2 = 100.0%(100.0%, 100.0%)

Other

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

26

215.2/215.2 = 100.0%(100.0%, 100.0%)

215.2/215.2 = 100.0%(100.0%, 100.0%)

215.2/215.2 = 100.0%(100.0%, 100.0%)

Other

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

12

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

Other

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

12

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

Other

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

12

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

Other

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

2

0/12.9 = 0.0%

0/12.9 = 0.0%

0/12.9 = 0.0%

Other

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

2

0/12.9 = 0.0%

0/12.9 = 0.0%

0/12.9 = 0.0%

Other

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

2

0/12.9 = 0.0%

0/12.9 = 0.0%

0/12.9 = 0.0%

Other

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

12

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

Other

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

12

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

Other

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

12

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

Other

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

26

215.2/215.2 = 100.0%(100.0%, 100.0%)

215.2/215.2 = 100.0%(100.0%, 100.0%)

215.2/215.2 = 100.0%(100.0%, 100.0%)

Other

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

26

215.2/215.2 = 100.0%(100.0%, 100.0%)

215.2/215.2 = 100.0%(100.0%, 100.0%)

215.2/215.2 = 100.0%(100.0%, 100.0%)

Other

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

26

215.2/215.2 = 100.0%(100.0%, 100.0%)

215.2/215.2 = 100.0%(100.0%, 100.0%)

215.2/215.2 = 100.0%(100.0%, 100.0%)

Other

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

12

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

Other

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

12

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

Other

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

12

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

Other

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

2

0/12.9 = 0.0%

0/12.9 = 0.0%

0/12.9 = 0.0%

Other

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

2

0/12.9 = 0.0%

0/12.9 = 0.0%

0/12.9 = 0.0%

Other

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

2

0/12.9 = 0.0%

0/12.9 = 0.0%

0/12.9 = 0.0%

Other

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

12

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

Other

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

12

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

Other

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

12

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

White

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

59

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

White

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

59

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

White

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

59

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

White

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

32

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

White

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

32

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

White

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

32

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

White

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

11

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

White

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

11

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

White

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

11

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

White

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

26

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

White

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

26

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

White

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

26

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

White

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

59

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

White

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

59

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

White

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

59

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

White

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

32

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

White

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

32

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

White

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

32

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

White

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

11

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

White

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

11

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

White

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

11

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

White

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

26

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

White

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

26

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

White

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

26

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

147.9/147.9 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

659.7/663 = 99.5%(96.4%, 99.9%)

White Non-Hispanic

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

659.7/663 = 99.5%(96.4%, 99.9%)

White Non-Hispanic

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

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

Table 2i. Percentage of responders, and participants with concentrations >= 2 x LLOD or >= 4 x LLOD for binding antibody markers by Race and ethnic group

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% Greater than 2xLLOD

% Greater than 4xLLOD

Race and ethnic group

White Non-Hispanic

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

659.7/663 = 99.5%(96.4%, 99.9%)

White Non-Hispanic

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

659.7/663 = 99.5%(96.4%, 99.9%)

White Non-Hispanic

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

6612/6612 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

112

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

663/663 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

401

3982/3982 = 100.0%(100.0%, 100.0%)

3982/3982 = 100.0%(100.0%, 100.0%)

3975.2/3982 = 99.8%(98.8%, 100.0%)

Communities of Color

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

401

3982/3982 = 100.0%(100.0%, 100.0%)

3982/3982 = 100.0%(100.0%, 100.0%)

3982/3982 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

401

3982/3982 = 100.0%(100.0%, 100.0%)

3982/3982 = 100.0%(100.0%, 100.0%)

3982/3982 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

110

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

110

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

110

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

65

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

Communities of Color

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

65

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

Communities of Color

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

65

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

Communities of Color

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

125

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

125

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

125

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

401

3982/3982 = 100.0%(100.0%, 100.0%)

3982/3982 = 100.0%(100.0%, 100.0%)

3982/3982 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

401

3982/3982 = 100.0%(100.0%, 100.0%)

3982/3982 = 100.0%(100.0%, 100.0%)

3982/3982 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

401

3982/3982 = 100.0%(100.0%, 100.0%)

3982/3982 = 100.0%(100.0%, 100.0%)

3982/3982 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

110

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

110

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

110

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

488/488 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

65

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

Communities of Color

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

65

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

Communities of Color

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

65

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

Communities of Color

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

125

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

125

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

Communities of Color

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

125

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

459/459 = 100.0%(100.0%, 100.0%)

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

114

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

114

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

114

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

51

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

51

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

51

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

24

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

24

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

24

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

33

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

33

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

33

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

114

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

114

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

114

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

1816.2/1816.2 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

51

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

51

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

51

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

24

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

24

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

24

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

33

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

33

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

33

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

215.3/215.3 = 100.0%(100.0%, 100.0%)

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

Table 2j. Percentage of responders, and participants with concentrations >= 2 x LLOD or >= 4 x LLOD for binding antibody markers by Age, Race and ethnic group

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% Greater than 2xLLOD

% Greater than 4xLLOD

Age, Race and ethnic group

Age < 65 Communities of Color

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

184

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3130.7/3137.5 = 99.8%(98.5%, 100.0%)

Age < 65 Communities of Color

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

184

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

184

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

61

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

61

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

61

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

30

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

Age < 65 Communities of Color

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

30

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

Age < 65 Communities of Color

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

30

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

Age < 65 Communities of Color

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

71

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

71

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

71

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

184

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

184

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

184

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

3137.5/3137.5 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

61

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

61

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

61

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

395/395 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

30

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

Age < 65 Communities of Color

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

30

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

Age < 65 Communities of Color

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

30

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

Age < 65 Communities of Color

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

71

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

71

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

Age < 65 Communities of Color

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

71

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

359/359 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

57

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

28

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

28

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

28

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

13

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

Age < 65 NA

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

13

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

Age < 65 NA

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

13

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

Age < 65 NA

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

17

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

17

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

17

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

57

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

1410.9/1410.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

28

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

28

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

28

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

13

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

Age < 65 NA

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

13

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

Age < 65 NA

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

13

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

Age < 65 NA

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

17

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

17

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

17

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

174.4/174.4 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

191

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

191

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

191

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

56

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

36

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

Age < 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

36

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

Age < 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

36

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

Age < 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

61

532.9/532.9 = 100.0%(100.0%, 100.0%)

532.9/532.9 = 100.0%(100.0%, 100.0%)

529.6/532.9 = 99.4%(95.5%, 99.9%)

Age < 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

61

532.9/532.9 = 100.0%(100.0%, 100.0%)

532.9/532.9 = 100.0%(100.0%, 100.0%)

529.6/532.9 = 99.4%(95.5%, 99.9%)

Age < 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

61

532.9/532.9 = 100.0%(100.0%, 100.0%)

532.9/532.9 = 100.0%(100.0%, 100.0%)

532.9/532.9 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

191

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

191

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

191

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

5204.1/5204.1 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

56

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

36

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

Age < 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

36

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

Age < 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

36

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

Age < 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

61

532.9/532.9 = 100.0%(100.0%, 100.0%)

532.9/532.9 = 100.0%(100.0%, 100.0%)

532.9/532.9 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

61

532.9/532.9 = 100.0%(100.0%, 100.0%)

532.9/532.9 = 100.0%(100.0%, 100.0%)

532.9/532.9 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

61

532.9/532.9 = 100.0%(100.0%, 100.0%)

532.9/532.9 = 100.0%(100.0%, 100.0%)

532.9/532.9 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

217

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

217

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

217

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

49

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

49

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

49

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

35

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

Age >= 65 Communities of Color

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

35

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

Age >= 65 Communities of Color

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

35

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

Age >= 65 Communities of Color

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

54

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

54

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

54

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

217

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

217

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

217

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

49

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

49

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

49

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

35

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

Age >= 65 Communities of Color

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

35

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

Age >= 65 Communities of Color

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

35

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

Age >= 65 Communities of Color

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

54

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

54

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

54

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

100/100 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

57

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

23

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

23

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

23

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

11

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

Age >= 65 NA

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

11

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

Age >= 65 NA

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

11

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

Age >= 65 NA

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

16

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

16

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

16

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

57

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

23

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

23

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

23

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

11

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

Age >= 65 NA

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

11

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

Age >= 65 NA

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

11

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

Age >= 65 NA

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

16

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

16

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

16

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

198

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

198

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

198

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

56

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

30

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

30

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

30

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

51

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

51

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

51

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

198

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

198

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

198

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

1407.8/1407.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

56

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

30

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

30

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

30

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

51

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

51

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

51

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

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

Table 3a. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by All participants

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

All participants

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

904

8231.8/12410.2 = 66.3%(61.9%, 70.5%)

11057/12410.2 = 89.1%(85.9%, 91.7%)

10165.7/12410.2 = 81.9%(78.1%, 85.2%)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

273

1076.4/1416.8 = 76.0%(68.1%, 82.4%)

1364.6/1416.8 = 96.3%(91.9%, 98.4%)

1275.9/1416.8 = 90.1%(83.9%, 94.0%)

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

155

0/2373.7 = 0.0%(0.0%, 0.0%)

52.5/2373.7 = 2.2%(0.5%, 9.5%)

0/2373.7 = 0.0%(0.0%, 0.0%)

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

270

691.9/1337.3 = 51.7%(43.7%, 59.7%)

1100.1/1337.3 = 82.3%(74.6%, 88.0%)

900.4/1337.3 = 67.3%(59.1%, 74.6%)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

904

11856/12410.2 = 95.5%(93.5%, 97.0%)

12283.9/12410.2 = 99.0%(97.9%, 99.5%)

12138.5/12410.2 = 97.8%(96.5%, 98.6%)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

273

1368.2/1416.8 = 96.6%(92.0%, 98.6%)

1413.9/1416.8 = 99.8%(98.6%, 100.0%)

1398.1/1416.8 = 98.7%(93.1%, 99.8%)

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

155

0/2373.7 = 0.0%(0.0%, 0.0%)

38.5/2373.7 = 1.6%(0.2%, 11.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

270

1121.5/1337.3 = 83.9%(76.3%, 89.3%)

1294.1/1337.3 = 96.8%(91.1%, 98.9%)

1192.2/1337.3 = 89.2%(81.9%, 93.7%)

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

Table 3b. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Age

Age < 65

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

432

6013.6/9752.5 = 61.7%(56.2%, 66.9%)

8473.2/9752.5 = 86.9%(82.8%, 90.1%)

7708.7/9752.5 = 79.0%(74.3%, 83.1%)

Age < 65

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

145

819.4/1132.2 = 72.4%(62.6%, 80.4%)

1080/1132.2 = 95.4%(89.8%, 98.0%)

1001/1132.2 = 88.4%(80.7%, 93.3%)

Age < 65

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

79

0/1841 = 0.0%(0.0%, 0.0%)

38.5/1841 = 2.1%(0.3%, 14.1%)

0/1841 = 0.0%(0.0%, 0.0%)

Age < 65

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

149

489.5/1066.3 = 45.9%(36.2%, 56.0%)

845.6/1066.3 = 79.3%(69.8%, 86.4%)

672.2/1066.3 = 63.0%(52.9%, 72.1%)

Age < 65

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

432

9292.8/9752.5 = 95.3%(92.7%, 97.0%)

9633.4/9752.5 = 98.8%(97.4%, 99.4%)

9510/9752.5 = 97.5%(95.8%, 98.5%)

Age < 65

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

145

1088.5/1132.2 = 96.1%(90.3%, 98.5%)

1129.3/1132.2 = 99.7%(98.2%, 100.0%)

1113.6/1132.2 = 98.4%(91.4%, 99.7%)

Age < 65

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

79

0/1841 = 0.0%(0.0%, 0.0%)

38.5/1841 = 2.1%(0.3%, 14.1%)

0/1841 = 0.0%(0.0%, 0.0%)

Age < 65

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

149

861.8/1066.3 = 80.8%(71.4%, 87.7%)

1025/1066.3 = 96.1%(88.9%, 98.7%)

928.2/1066.3 = 87.0%(78.0%, 92.7%)

Age >= 65

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

472

2218.2/2657.6 = 83.5%(79.7%, 86.7%)

2583.8/2657.6 = 97.2%(95.2%, 98.4%)

2457.1/2657.6 = 92.5%(89.5%, 94.6%)

Age >= 65

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

128

257.1/284.6 = 90.3%(83.6%, 94.5%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

274.9/284.6 = 96.6%(91.2%, 98.7%)

Age >= 65

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

76

0/532.8 = 0.0%(0.0%, 0.0%)

13.9/532.8 = 2.6%(0.6%, 10.3%)

0/532.8 = 0.0%(0.0%, 0.0%)

Age >= 65

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

121

202.4/271 = 74.7%(66.0%, 81.8%)

254.5/271 = 93.9%(87.6%, 97.1%)

228.1/271 = 84.2%(76.3%, 89.8%)

Age >= 65

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

472

2563.2/2657.6 = 96.4%(94.2%, 97.9%)

2650.5/2657.6 = 99.7%(98.1%, 100.0%)

2628.5/2657.6 = 98.9%(97.3%, 99.6%)

Age >= 65

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

128

279.7/284.6 = 98.3%(93.3%, 99.6%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

284.6/284.6 = 100.0%(100.0%, 100.0%)

Age >= 65

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

76

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

Age >= 65

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

121

259.6/271 = 95.8%(90.1%, 98.3%)

269.1/271 = 99.3%(95.2%, 99.9%)

264/271 = 97.4%(92.1%, 99.2%)

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

Table 3c. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Risk for Severe Covid-19

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Risk for Severe Covid-19

At-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

460

2161.6/3348.4 = 64.6%(59.8%, 69.0%)

2982.2/3348.4 = 89.1%(85.5%, 91.8%)

2671.8/3348.4 = 79.8%(75.5%, 83.5%)

At-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

126

283/359.5 = 78.7%(70.3%, 85.2%)

341.1/359.5 = 94.9%(89.1%, 97.7%)

313.7/359.5 = 87.2%(79.9%, 92.2%)

At-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

78

0/590.5 = 0.0%(0.0%, 0.0%)

13.9/590.5 = 2.4%(0.6%, 9.3%)

0/590.5 = 0.0%(0.0%, 0.0%)

At-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

120

182/314.6 = 57.8%(48.6%, 66.6%)

262.1/314.6 = 83.3%(75.2%, 89.1%)

228.1/314.6 = 72.5%(63.4%, 80.0%)

At-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

460

3110.9/3348.4 = 92.9%(89.8%, 95.1%)

3276.8/3348.4 = 97.9%(95.7%, 98.9%)

3204.1/3348.4 = 95.7%(93.0%, 97.4%)

At-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

126

344.8/359.5 = 95.9%(90.3%, 98.3%)

356.7/359.5 = 99.2%(94.5%, 99.9%)

356.7/359.5 = 99.2%(94.5%, 99.9%)

At-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

78

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

At-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

120

278.6/314.6 = 88.6%(81.3%, 93.2%)

311.3/314.6 = 98.9%(92.7%, 99.9%)

295.4/314.6 = 93.9%(87.4%, 97.1%)

Not at-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

444

6070.2/9061.8 = 67.0%(61.1%, 72.4%)

8074.8/9061.8 = 89.1%(84.7%, 92.3%)

7494/9061.8 = 82.7%(77.6%, 86.8%)

Not at-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

147

793.5/1057.2 = 75.1%(64.6%, 83.2%)

1023.4/1057.2 = 96.8%(90.0%, 99.0%)

962.2/1057.2 = 91.0%(82.3%, 95.7%)

Not at-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

77

0/1783.2 = 0.0%(0.0%, 0.0%)

38.5/1783.2 = 2.2%(0.3%, 14.5%)

0/1783.2 = 0.0%(0.0%, 0.0%)

Not at-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

150

509.9/1022.7 = 49.9%(39.7%, 60.0%)

838.1/1022.7 = 81.9%(71.9%, 89.0%)

672.3/1022.7 = 65.7%(55.2%, 74.9%)

Not at-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

444

8745.1/9061.8 = 96.5%(93.6%, 98.1%)

9007.2/9061.8 = 99.4%(97.6%, 99.8%)

8934.4/9061.8 = 98.6%(96.7%, 99.4%)

Not at-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

147

1023.4/1057.2 = 96.8%(90.0%, 99.0%)

1057.2/1057.2 = 100.0%(100.0%, 100.0%)

1041.4/1057.2 = 98.5%(89.9%, 99.8%)

Not at-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

77

0/1783.2 = 0.0%(0.0%, 0.0%)

38.5/1783.2 = 2.2%(0.3%, 14.5%)

0/1783.2 = 0.0%(0.0%, 0.0%)

Not at-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

150

842.9/1022.7 = 82.4%(72.6%, 89.3%)

982.8/1022.7 = 96.1%(88.5%, 98.7%)

896.9/1022.7 = 87.7%(78.2%, 93.4%)

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

Table 3d. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, Risk for Severe Covid-19

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Age, Risk for Severe Covid-19

Age < 65 At-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

216

1081.5/1993.3 = 54.3%(47.3%, 61.0%)

1686/1993.3 = 84.6%(79.0%, 88.9%)

1466.1/1993.3 = 73.6%(67.0%, 79.2%)

Age < 65 At-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

73

175/240 = 72.9%(61.3%, 82.1%)

221.6/240 = 92.3%(83.7%, 96.6%)

199/240 = 82.9%(72.5%, 89.9%)

Age < 65 At-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

39

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

Age < 65 At-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

75

108/211.7 = 51.0%(39.3%, 62.6%)

173.7/211.7 = 82.1%(71.4%, 89.4%)

146/211.7 = 69.0%(57.1%, 78.8%)

Age < 65 At-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

216

1824.3/1993.3 = 91.5%(86.8%, 94.7%)

1928.8/1993.3 = 96.8%(93.2%, 98.5%)

1860/1993.3 = 93.3%(88.9%, 96.1%)

Age < 65 At-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

73

230.1/240 = 95.9%(87.6%, 98.7%)

237.1/240 = 98.8%(91.7%, 99.8%)

237.1/240 = 98.8%(91.7%, 99.8%)

Age < 65 At-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

39

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

Age < 65 At-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

75

182.6/211.7 = 86.3%(76.4%, 92.4%)

208.4/211.7 = 98.4%(89.2%, 99.8%)

195/211.7 = 92.1%(82.9%, 96.5%)

Age < 65 Not at-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

216

4932/7759.3 = 63.6%(56.8%, 69.8%)

6787.2/7759.3 = 87.5%(82.4%, 91.3%)

6242.6/7759.3 = 80.5%(74.5%, 85.3%)

Age < 65 Not at-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

72

644.4/892.2 = 72.2%(60.0%, 81.9%)

858.4/892.2 = 96.2%(88.1%, 98.9%)

802.1/892.2 = 89.9%(79.5%, 95.3%)

Age < 65 Not at-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

40

0/1522.8 = 0.0%(0.0%, 0.0%)

38.5/1522.8 = 2.5%(0.3%, 17.2%)

0/1522.8 = 0.0%(0.0%, 0.0%)

Age < 65 Not at-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

74

381.5/854.6 = 44.6%(32.9%, 57.0%)

671.9/854.6 = 78.6%(66.7%, 87.1%)

526.3/854.6 = 61.6%(49.2%, 72.6%)

Age < 65 Not at-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

216

7468.5/7759.3 = 96.3%(92.8%, 98.1%)

7704.6/7759.3 = 99.3%(97.2%, 99.8%)

7650/7759.3 = 98.6%(96.3%, 99.5%)

Age < 65 Not at-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

72

858.4/892.2 = 96.2%(88.1%, 98.9%)

892.2/892.2 = 100.0%(100.0%, 100.0%)

876.4/892.2 = 98.2%(87.9%, 99.8%)

Age < 65 Not at-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

40

0/1522.8 = 0.0%(0.0%, 0.0%)

38.5/1522.8 = 2.5%(0.3%, 17.2%)

0/1522.8 = 0.0%(0.0%, 0.0%)

Age < 65 Not at-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

74

679.2/854.6 = 79.5%(67.7%, 87.7%)

816.6/854.6 = 95.6%(86.2%, 98.7%)

733.2/854.6 = 85.8%(74.4%, 92.6%)

Age >= 65 At-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

244

1080.1/1355.1 = 79.7%(73.9%, 84.5%)

1296.2/1355.1 = 95.7%(92.1%, 97.7%)

1205.7/1355.1 = 89.0%(84.1%, 92.5%)

Age >= 65 At-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

53

108/119.6 = 90.3%(78.1%, 96.1%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

114.7/119.6 = 95.9%(84.6%, 99.0%)

Age >= 65 At-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

39

0/272.3 = 0.0%(0.0%, 0.0%)

13.9/272.3 = 5.1%(1.2%, 19.7%)

0/272.3 = 0.0%(0.0%, 0.0%)

Age >= 65 At-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

45

74/102.9 = 71.9%(56.3%, 83.5%)

88.3/102.9 = 85.8%(71.1%, 93.7%)

82.1/102.9 = 79.7%(64.4%, 89.5%)

Age >= 65 At-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

244

1286.6/1355.1 = 94.9%(90.9%, 97.2%)

1348/1355.1 = 99.5%(96.3%, 99.9%)

1344.1/1355.1 = 99.2%(96.6%, 99.8%)

Age >= 65 At-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

53

114.7/119.6 = 95.9%(84.6%, 99.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

119.6/119.6 = 100.0%(100.0%, 100.0%)

Age >= 65 At-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

39

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

Age >= 65 At-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

45

96/102.9 = 93.2%(79.9%, 98.0%)

102.9/102.9 = 100.0%(100.0%, 100.0%)

100.4/102.9 = 97.5%(83.3%, 99.7%)

Age >= 65 Not at-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

228

1138.2/1302.5 = 87.4%(82.1%, 91.2%)

1287.6/1302.5 = 98.9%(96.3%, 99.7%)

1251.4/1302.5 = 96.1%(92.4%, 98.0%)

Age >= 65 Not at-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

75

149.1/165 = 90.4%(80.8%, 95.4%)

165/165 = 100.0%(100.0%, 100.0%)

160.2/165 = 97.1%(88.7%, 99.3%)

Age >= 65 Not at-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

37

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

Age >= 65 Not at-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

76

128.4/168.1 = 76.4%(65.1%, 84.9%)

166.2/168.1 = 98.9%(92.3%, 99.9%)

146/168.1 = 86.9%(76.8%, 93.0%)

Age >= 65 Not at-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

228

1276.6/1302.5 = 98.0%(95.1%, 99.2%)

1302.5/1302.5 = 100.0%(100.0%, 100.0%)

1284.4/1302.5 = 98.6%(95.6%, 99.6%)

Age >= 65 Not at-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

75

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

165/165 = 100.0%(100.0%, 100.0%)

Age >= 65 Not at-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

37

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

Age >= 65 Not at-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

76

163.7/168.1 = 97.4%(89.6%, 99.4%)

166.2/168.1 = 98.9%(92.3%, 99.9%)

163.7/168.1 = 97.4%(89.6%, 99.4%)

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

Table 3e. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Sex

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Sex

Female

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

511

4643.3/6958.3 = 66.7%(60.9%, 72.1%)

6204.1/6958.3 = 89.2%(84.7%, 92.5%)

5589.4/6958.3 = 80.3%(75.0%, 84.8%)

Female

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

149

550.9/763.9 = 72.1%(60.8%, 81.2%)

727.1/763.9 = 95.2%(87.1%, 98.3%)

697.4/763.9 = 91.3%(83.6%, 95.6%)

Female

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

85

0/1307.2 = 0.0%(0.0%, 0.0%)

45/1307.2 = 3.4%(0.6%, 17.6%)

0/1307.2 = 0.0%(0.0%, 0.0%)

Female

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

149

398.7/800.5 = 49.8%(39.0%, 60.6%)

652.1/800.5 = 81.5%(70.7%, 88.9%)

510.3/800.5 = 63.7%(52.3%, 73.8%)

Female

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

511

6613.1/6958.3 = 95.0%(91.9%, 97.0%)

6895.3/6958.3 = 99.1%(97.5%, 99.7%)

6779.1/6958.3 = 97.4%(95.3%, 98.6%)

Female

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

149

742.6/763.9 = 97.2%(92.5%, 99.0%)

761/763.9 = 99.6%(97.4%, 99.9%)

761/763.9 = 99.6%(97.4%, 99.9%)

Female

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

85

0/1307.2 = 0.0%(0.0%, 0.0%)

38.5/1307.2 = 2.9%(0.4%, 19.1%)

0/1307.2 = 0.0%(0.0%, 0.0%)

Female

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

149

661.1/800.5 = 82.6%(72.1%, 89.7%)

770.3/800.5 = 96.2%(86.0%, 99.1%)

721.9/800.5 = 90.2%(80.0%, 95.5%)

Male

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

393

3588.5/5451.9 = 65.8%(58.9%, 72.1%)

4853/5451.9 = 89.0%(83.9%, 92.7%)

4576.3/5451.9 = 83.9%(78.2%, 88.4%)

Male

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

124

525.5/652.9 = 80.5%(68.4%, 88.7%)

637.5/652.9 = 97.6%(91.7%, 99.4%)

578.5/652.9 = 88.6%(77.0%, 94.8%)

Male

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

70

0/1066.6 = 0.0%(0.0%, 0.0%)

7.5/1066.6 = 0.7%(0.1%, 5.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

Male

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

121

293.2/536.8 = 54.6%(42.3%, 66.4%)

448/536.8 = 83.5%(70.7%, 91.4%)

390/536.8 = 72.7%(60.3%, 82.3%)

Male

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

393

5242.8/5451.9 = 96.2%(93.0%, 97.9%)

5388.6/5451.9 = 98.8%(96.8%, 99.6%)

5359.4/5451.9 = 98.3%(96.3%, 99.2%)

Male

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

124

625.7/652.9 = 95.8%(85.1%, 98.9%)

652.9/652.9 = 100.0%(100.0%, 100.0%)

637.1/652.9 = 97.6%(84.1%, 99.7%)

Male

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

70

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

Male

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

121

460.3/536.8 = 85.8%(72.9%, 93.1%)

523.9/536.8 = 97.6%(91.2%, 99.4%)

470.4/536.8 = 87.6%(74.7%, 94.4%)

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

Table 3f. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, sex

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Age, sex

Age < 65 Female

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

245

3414.4/5478.9 = 62.3%(55.1%, 69.1%)

4765.5/5478.9 = 87.0%(81.3%, 91.1%)

4223.9/5478.9 = 77.1%(70.4%, 82.7%)

Age < 65 Female

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

77

407/603.5 = 67.4%(53.4%, 78.9%)

566.7/603.5 = 93.9%(83.7%, 97.9%)

544.3/603.5 = 90.2%(80.4%, 95.4%)

Age < 65 Female

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

45

0/1028.3 = 0.0%(0.0%, 0.0%)

38.5/1028.3 = 3.7%(0.5%, 24.1%)

0/1028.3 = 0.0%(0.0%, 0.0%)

Age < 65 Female

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

89

304.4/667 = 45.6%(33.2%, 58.7%)

530.6/667 = 79.6%(66.7%, 88.3%)

403.9/667 = 60.6%(47.2%, 72.5%)

Age < 65 Female

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

245

5184.9/5478.9 = 94.6%(90.6%, 97.0%)

5416/5478.9 = 98.9%(96.8%, 99.6%)

5314.7/5478.9 = 97.0%(94.3%, 98.4%)

Age < 65 Female

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

77

584.6/603.5 = 96.9%(90.7%, 99.0%)

600.7/603.5 = 99.5%(96.6%, 99.9%)

600.7/603.5 = 99.5%(96.6%, 99.9%)

Age < 65 Female

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

45

0/1028.3 = 0.0%(0.0%, 0.0%)

38.5/1028.3 = 3.7%(0.5%, 24.1%)

0/1028.3 = 0.0%(0.0%, 0.0%)

Age < 65 Female

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

89

534.6/667 = 80.1%(67.6%, 88.6%)

636.7/667 = 95.5%(83.3%, 98.9%)

590.9/667 = 88.6%(76.3%, 94.9%)

Age < 65 Male

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

187

2599.2/4273.6 = 60.8%(52.2%, 68.8%)

3707.7/4273.6 = 86.8%(80.2%, 91.4%)

3484.7/4273.6 = 81.5%(74.2%, 87.1%)

Age < 65 Male

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

68

412.4/528.7 = 78.0%(63.1%, 88.0%)

513.3/528.7 = 97.1%(89.7%, 99.2%)

456.8/528.7 = 86.4%(72.1%, 94.0%)

Age < 65 Male

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

34

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

Age < 65 Male

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

60

185.2/399.3 = 46.4%(30.9%, 62.5%)

315/399.3 = 78.9%(62.0%, 89.5%)

268.3/399.3 = 67.2%(51.0%, 80.1%)

Age < 65 Male

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

187

4107.9/4273.6 = 96.1%(92.0%, 98.2%)

4217.4/4273.6 = 98.7%(96.0%, 99.6%)

4195.4/4273.6 = 98.2%(95.6%, 99.3%)

Age < 65 Male

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

68

503.9/528.7 = 95.3%(81.4%, 99.0%)

528.7/528.7 = 100.0%(100.0%, 100.0%)

512.9/528.7 = 97.0%(80.6%, 99.6%)

Age < 65 Male

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

34

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

Age < 65 Male

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

60

327.3/399.3 = 82.0%(64.9%, 91.8%)

388.2/399.3 = 97.2%(87.9%, 99.4%)

337.3/399.3 = 84.5%(67.3%, 93.5%)

Age >= 65 Female

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

266

1228.9/1479.4 = 83.1%(77.9%, 87.2%)

1438.6/1479.4 = 97.2%(94.4%, 98.7%)

1365.5/1479.4 = 92.3%(88.2%, 95.0%)

Age >= 65 Female

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

72

143.9/160.4 = 89.7%(79.8%, 95.1%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

153.1/160.4 = 95.5%(86.6%, 98.6%)

Age >= 65 Female

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

40

0/278.8 = 0.0%(0.0%, 0.0%)

6.5/278.8 = 2.3%(0.3%, 15.9%)

0/278.8 = 0.0%(0.0%, 0.0%)

Age >= 65 Female

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

60

94.3/133.5 = 70.7%(57.3%, 81.2%)

121.5/133.5 = 91.0%(79.6%, 96.3%)

106.4/133.5 = 79.7%(66.9%, 88.4%)

Age >= 65 Female

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

266

1428.2/1479.4 = 96.5%(93.3%, 98.2%)

1479.4/1479.4 = 100.0%(100.0%, 100.0%)

1464.5/1479.4 = 99.0%(96.7%, 99.7%)

Age >= 65 Female

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

72

157.9/160.4 = 98.5%(89.6%, 99.8%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

Age >= 65 Female

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

40

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

Age >= 65 Female

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

60

126.6/133.5 = 94.8%(84.4%, 98.4%)

133.5/133.5 = 100.0%(100.0%, 100.0%)

131/133.5 = 98.1%(87.0%, 99.7%)

Age >= 65 Male

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

206

989.4/1178.3 = 84.0%(77.9%, 88.6%)

1145.3/1178.3 = 97.2%(93.7%, 98.8%)

1091.6/1178.3 = 92.6%(87.8%, 95.7%)

Age >= 65 Male

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

56

113.1/124.2 = 91.1%(79.6%, 96.4%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

121.8/124.2 = 98.0%(86.7%, 99.7%)

Age >= 65 Male

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

36

0/253.9 = 0.0%(0.0%, 0.0%)

7.5/253.9 = 2.9%(0.4%, 19.7%)

0/253.9 = 0.0%(0.0%, 0.0%)

Age >= 65 Male

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

61

108/137.5 = 78.6%(66.6%, 87.1%)

133.1/137.5 = 96.8%(87.3%, 99.3%)

121.7/137.5 = 88.5%(77.2%, 94.6%)

Age >= 65 Male

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

206

1134.9/1178.3 = 96.3%(92.3%, 98.3%)

1171.2/1178.3 = 99.4%(95.8%, 99.9%)

1164.1/1178.3 = 98.8%(95.3%, 99.7%)

Age >= 65 Male

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

56

121.8/124.2 = 98.0%(86.7%, 99.7%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

124.2/124.2 = 100.0%(100.0%, 100.0%)

Age >= 65 Male

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

36

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

Age >= 65 Male

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

61

133.1/137.5 = 96.8%(87.3%, 99.3%)

135.6/137.5 = 98.7%(90.6%, 99.8%)

133.1/137.5 = 96.8%(87.3%, 99.3%)

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

Table 3g. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Hispanic or Latino ethnicity

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Hispanic or Latino ethnicity

Hispanic or Latino

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

112

564.8/1003.1 = 56.3%(42.8%, 68.9%)

831.6/1003.1 = 82.9%(68.8%, 91.4%)

754.6/1003.1 = 75.2%(61.0%, 85.5%)

Hispanic or Latino

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

38

144.1/181.5 = 79.4%(57.8%, 91.5%)

169.7/181.5 = 93.5%(71.7%, 98.8%)

164/181.5 = 90.3%(72.2%, 97.1%)

Hispanic or Latino

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

20

0/323.2 = 0.0%(0.0%, 0.0%)

6.5/323.2 = 2.0%(0.2%, 15.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

Hispanic or Latino

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

45

74.9/166.7 = 44.9%(27.9%, 63.3%)

148.1/166.7 = 88.8%(72.8%, 95.9%)

107.3/166.7 = 64.4%(44.6%, 80.2%)

Hispanic or Latino

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

112

984.6/1003.1 = 98.2%(95.0%, 99.3%)

1003.1/1003.1 = 100.0%(100.0%, 100.0%)

995.3/1003.1 = 99.2%(96.9%, 99.8%)

Hispanic or Latino

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

38

172.5/181.5 = 95.0%(69.3%, 99.4%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

Hispanic or Latino

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

20

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

Hispanic or Latino

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

45

140.3/166.7 = 84.1%(65.3%, 93.7%)

166.7/166.7 = 100.0%(100.0%, 100.0%)

162.2/166.7 = 97.3%(89.8%, 99.3%)

Not Hispanic or Latino

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

723

6967.7/10413.1 = 66.9%(62.0%, 71.5%)

9350.6/10413.1 = 89.8%(86.3%, 92.5%)

8550.4/10413.1 = 82.1%(77.9%, 85.6%)

Not Hispanic or Latino

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

208

829.5/1083.5 = 76.6%(67.3%, 83.8%)

1043.1/1083.5 = 96.3%(90.6%, 98.6%)

1006.7/1083.5 = 92.9%(86.6%, 96.4%)

Not Hispanic or Latino

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

119

0/1750.4 = 0.0%(0.0%, 0.0%)

46/1750.4 = 2.6%(0.5%, 13.3%)

0/1750.4 = 0.0%(0.0%, 0.0%)

Not Hispanic or Latino

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

198

533.7/1016.5 = 52.5%(43.0%, 61.8%)

825/1016.5 = 81.2%(71.8%, 87.9%)

671.8/1016.5 = 66.1%(56.2%, 74.7%)

Not Hispanic or Latino

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

723

9926.8/10413.1 = 95.3%(93.1%, 96.9%)

10286.9/10413.1 = 98.8%(97.5%, 99.4%)

10149.3/10413.1 = 97.5%(95.9%, 98.4%)

Not Hispanic or Latino

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

208

1059.8/1083.5 = 97.8%(94.5%, 99.1%)

1080.6/1083.5 = 99.7%(98.1%, 100.0%)

1080.6/1083.5 = 99.7%(98.1%, 100.0%)

Not Hispanic or Latino

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

119

0/1750.4 = 0.0%(0.0%, 0.0%)

38.5/1750.4 = 2.2%(0.3%, 14.6%)

0/1750.4 = 0.0%(0.0%, 0.0%)

Not Hispanic or Latino

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

198

872.8/1016.5 = 85.9%(76.9%, 91.7%)

993.6/1016.5 = 97.7%(90.7%, 99.5%)

913.9/1016.5 = 89.9%(81.2%, 94.8%)

Not reported and unknown

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

69

699.3/994 = 70.4%(53.4%, 83.1%)

874.9/994 = 88.0%(68.6%, 96.1%)

860.7/994 = 86.6%(68.0%, 95.2%)

Not reported and unknown

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

27

102.8/151.8 = 67.8%(34.8%, 89.2%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

105.3/151.8 = 69.4%(35.8%, 90.2%)

Not reported and unknown

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

16

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

27

83.2/154.1 = 54.0%(25.8%, 79.9%)

127.1/154.1 = 82.5%(48.4%, 95.9%)

121.2/154.1 = 78.7%(46.9%, 93.9%)

Not reported and unknown

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

69

944.5/994 = 95.0%(75.5%, 99.2%)

994/994 = 100.0%(100.0%, 100.0%)

994/994 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

27

136/151.8 = 89.6%(45.8%, 98.9%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

136/151.8 = 89.6%(45.8%, 98.9%)

Not reported and unknown

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

16

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

27

108.3/154.1 = 70.3%(37.6%, 90.3%)

133.8/154.1 = 86.8%(51.1%, 97.6%)

116.1/154.1 = 75.4%(42.3%, 92.7%)

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

Table 3h. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Race

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Race

Not reported and unknown

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

82

801.9/1261.1 = 63.6%(47.9%, 76.8%)

1132.3/1261.1 = 89.8%(75.3%, 96.2%)

990.1/1261.1 = 78.5%(63.1%, 88.7%)

Not reported and unknown

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

29

111.7/138 = 80.9%(45.8%, 95.5%)

134.5/138 = 97.4%(82.3%, 99.7%)

134.5/138 = 97.4%(82.3%, 99.7%)

Not reported and unknown

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

16

0/214.9 = 0.0%(0.0%, 0.0%)

7.5/214.9 = 3.5%(0.4%, 25.2%)

0/214.9 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

19

46.7/120.5 = 38.8%(15.6%, 68.5%)

98.7/120.5 = 81.9%(40.5%, 96.8%)

65.1/120.5 = 54.1%(22.7%, 82.6%)

Not reported and unknown

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

82

1224.8/1261.1 = 97.1%(92.4%, 99.0%)

1250/1261.1 = 99.1%(93.8%, 99.9%)

1231.9/1261.1 = 97.7%(92.9%, 99.3%)

Not reported and unknown

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

29

132.1/138 = 95.7%(82.6%, 99.0%)

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

16

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

19

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

23

149/238.7 = 62.4%(29.5%, 86.8%)

211.4/238.7 = 88.6%(42.3%, 98.8%)

180.2/238.7 = 75.5%(37.4%, 94.1%)

American Indian or Alaska Native

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

8

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

4

0/59.5 = 0.0%

0/59.5 = 0.0%

0/59.5 = 0.0%

American Indian or Alaska Native

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

9

10.1/24.2 = 41.6%(9.7%, 82.5%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

23

234.8/238.7 = 98.4%(87.9%, 99.8%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

8

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

4

0/59.5 = 0.0%

0/59.5 = 0.0%

0/59.5 = 0.0%

American Indian or Alaska Native

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

9

22/24.2 = 90.7%(36.4%, 99.4%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

22/24.2 = 90.7%(36.4%, 99.4%)

Asian

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

72

475.4/724.7 = 65.6%(48.4%, 79.5%)

692.7/724.7 = 95.6%(90.4%, 98.0%)

647.9/724.7 = 89.4%(77.3%, 95.4%)

Asian

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

24

51.2/105.2 = 48.7%(27.2%, 70.7%)

87.2/105.2 = 82.9%(48.4%, 96.2%)

78.2/105.2 = 74.3%(42.5%, 91.9%)

Asian

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

11

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

Asian

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

22

54.5/78.3 = 69.6%(37.8%, 89.7%)

68.3/78.3 = 87.2%(49.5%, 97.9%)

58.7/78.3 = 74.9%(41.0%, 92.8%)

Asian

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

72

713.1/724.7 = 98.4%(95.1%, 99.5%)

724.7/724.7 = 100.0%(100.0%, 100.0%)

720.8/724.7 = 99.5%(96.1%, 99.9%)

Asian

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

24

96.2/105.2 = 91.4%(52.4%, 99.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

105.2/105.2 = 100.0%(100.0%, 100.0%)

Asian

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

11

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

Asian

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

22

60.5/78.3 = 77.3%(42.3%, 94.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

78.3/78.3 = 100.0%(100.0%, 100.0%)

Black or African American

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

186

1210.8/1902.4 = 63.6%(53.4%, 72.8%)

1566.2/1902.4 = 82.3%(72.6%, 89.1%)

1476.7/1902.4 = 77.6%(67.6%, 85.2%)

Black or African American

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

37

109.9/150.7 = 73.0%(52.2%, 87.0%)

142.1/150.7 = 94.3%(84.8%, 98.0%)

136.5/150.7 = 90.6%(82.0%, 95.3%)

Black or African American

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

30

0/460.2 = 0.0%(0.0%, 0.0%)

6.5/460.2 = 1.4%(0.2%, 10.3%)

0/460.2 = 0.0%(0.0%, 0.0%)

Black or African American

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

54

88.4/189.9 = 46.6%(30.9%, 63.0%)

145.6/189.9 = 76.7%(58.3%, 88.6%)

108.5/189.9 = 57.2%(40.1%, 72.6%)

Black or African American

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

186

1700.7/1902.4 = 89.4%(80.6%, 94.5%)

1834.2/1902.4 = 96.4%(89.2%, 98.9%)

1766/1902.4 = 92.8%(84.7%, 96.8%)

Black or African American

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

37

147.8/150.7 = 98.1%(86.8%, 99.8%)

147.8/150.7 = 98.1%(86.8%, 99.8%)

147.8/150.7 = 98.1%(86.8%, 99.8%)

Black or African American

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

30

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

Black or African American

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

54

170.2/189.9 = 89.6%(71.3%, 96.8%)

180.2/189.9 = 94.9%(76.4%, 99.1%)

178/189.9 = 93.7%(77.0%, 98.5%)

Multiracial

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

50

236.6/504.6 = 46.9%(28.9%, 65.7%)

402.3/504.6 = 79.7%(57.0%, 92.1%)

398.4/504.6 = 79.0%(56.5%, 91.5%)

Multiracial

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

16

63/77.7 = 81.1%(42.7%, 96.1%)

74.8/77.7 = 96.3%(73.7%, 99.6%)

72/77.7 = 92.7%(75.3%, 98.1%)

Multiracial

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

12

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

Multiracial

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

12

27.1/46.7 = 57.9%(17.4%, 90.0%)

44.5/46.7 = 95.2%(64.7%, 99.5%)

34.8/46.7 = 74.6%(26.0%, 96.1%)

Multiracial

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

50

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

504.6/504.6 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

16

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

12

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

Multiracial

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

12

31.2/46.7 = 66.7%(22.1%, 93.4%)

46.7/46.7 = 100.0%(100.0%, 100.0%)

39/46.7 = 83.4%(24.9%, 98.7%)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

17

136.3/197.8 = 68.9%(28.3%, 92.6%)

170.4/197.8 = 86.2%(34.1%, 98.7%)

136.3/197.8 = 68.9%(28.3%, 92.6%)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

3

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

3

0/22 = 0.0%

0/22 = 0.0%

0/22 = 0.0%

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

4

11.9/13.7 = 86.5%

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

17

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

197.8/197.8 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

3

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

3

0/22 = 0.0%

0/22 = 0.0%

0/22 = 0.0%

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

4

11.5/13.7 = 83.6%

13.7/13.7 = 100.0%

13.7/13.7 = 100.0%

Other

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

26

159.7/215.2 = 74.2%(39.6%, 92.7%)

208.4/215.2 = 96.8%(78.4%, 99.6%)

173.3/215.2 = 80.5%(41.7%, 96.0%)

Other

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

12

53.1/62.1 = 85.5%(29.5%, 98.8%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

Other

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

2

0/12.9 = 0.0%

0/12.9 = 0.0%

0/12.9 = 0.0%

Other

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

12

13.7/53.1 = 25.9%(5.2%, 69.2%)

45.3/53.1 = 85.3%(29.1%, 98.8%)

35.3/53.1 = 66.4%(23.3%, 92.8%)

Other

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

26

208.4/215.2 = 96.8%(78.4%, 99.6%)

208.4/215.2 = 96.8%(78.4%, 99.6%)

208.4/215.2 = 96.8%(78.4%, 99.6%)

Other

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

12

53.1/62.1 = 85.5%(29.5%, 98.8%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

Other

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

2

0/12.9 = 0.0%

0/12.9 = 0.0%

0/12.9 = 0.0%

Other

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

12

50.8/53.1 = 95.7%(67.9%, 99.6%)

53.1/53.1 = 100.0%(100.0%, 100.0%)

50.8/53.1 = 95.7%(67.9%, 99.6%)

White

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

59

517.9/753.7 = 68.7%(49.2%, 83.3%)

589.9/753.7 = 78.3%(57.4%, 90.6%)

568.8/753.7 = 75.5%(55.2%, 88.5%)

White

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

32

128.9/168.9 = 76.4%(45.7%, 92.5%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

131.4/168.9 = 77.8%(46.5%, 93.4%)

White

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

11

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

White

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

26

88.8/147.9 = 60.0%(30.3%, 83.9%)

128.7/147.9 = 87.0%(49.5%, 97.9%)

106.8/147.9 = 72.2%(42.4%, 90.2%)

White

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

59

693.6/753.7 = 92.0%(70.4%, 98.2%)

753.7/753.7 = 100.0%(100.0%, 100.0%)

749.8/753.7 = 99.5%(96.2%, 99.9%)

White

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

32

153.1/168.9 = 90.7%(50.1%, 98.9%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

153.1/168.9 = 90.7%(50.1%, 98.9%)

White

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

11

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

White

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

26

97.6/147.9 = 66.0%(34.8%, 87.6%)

129.4/147.9 = 87.5%(49.0%, 98.1%)

111.8/147.9 = 75.6%(42.3%, 92.9%)

White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

389

4544.1/6612 = 68.7%(62.2%, 74.6%)

6083.4/6612 = 92.0%(87.5%, 95.0%)

5594/6612 = 84.6%(79.2%, 88.8%)

White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

112

508.4/664 = 76.6%(63.4%, 86.0%)

644.7/664 = 97.1%(85.8%, 99.5%)

611.1/664 = 92.0%(81.8%, 96.7%)

White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

66

0/1027 = 0.0%(0.0%, 0.0%)

38.5/1027 = 3.8%(0.5%, 23.7%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

112

350.7/663 = 52.9%(40.3%, 65.2%)

531.2/663 = 80.1%(67.1%, 88.8%)

453.1/663 = 68.3%(55.2%, 79.1%)

White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

389

6378.2/6612 = 96.5%(93.7%, 98.0%)

6571.8/6612 = 99.4%(98.4%, 99.8%)

6520.5/6612 = 98.6%(97.4%, 99.3%)

White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

112

658.1/664 = 99.1%(96.3%, 99.8%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

66

0/1027 = 0.0%(0.0%, 0.0%)

38.5/1027 = 3.8%(0.5%, 23.7%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

112

557.3/663 = 84.0%(71.1%, 91.8%)

647.9/663 = 97.7%(84.9%, 99.7%)

578.2/663 = 87.2%(74.5%, 94.1%)

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

Table 3i. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Race and ethnic group

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Race and ethnic group

White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

389

4544.1/6612 = 68.7%(62.2%, 74.6%)

6083.4/6612 = 92.0%(87.5%, 95.0%)

5594/6612 = 84.6%(79.2%, 88.8%)

White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

112

508.4/664 = 76.6%(63.4%, 86.0%)

644.7/664 = 97.1%(85.8%, 99.5%)

611.1/664 = 92.0%(81.8%, 96.7%)

White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

66

0/1027 = 0.0%(0.0%, 0.0%)

38.5/1027 = 3.8%(0.5%, 23.7%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

112

350.7/663 = 52.9%(40.3%, 65.2%)

531.2/663 = 80.1%(67.1%, 88.8%)

453.1/663 = 68.3%(55.2%, 79.1%)

White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

389

6378.2/6612 = 96.5%(93.7%, 98.0%)

6571.8/6612 = 99.4%(98.4%, 99.8%)

6520.5/6612 = 98.6%(97.4%, 99.3%)

White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

112

658.1/664 = 99.1%(96.3%, 99.8%)

664/664 = 100.0%(100.0%, 100.0%)

664/664 = 100.0%(100.0%, 100.0%)

White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

66

0/1027 = 0.0%(0.0%, 0.0%)

38.5/1027 = 3.8%(0.5%, 23.7%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

112

557.3/663 = 84.0%(71.1%, 91.8%)

647.9/663 = 97.7%(84.9%, 99.7%)

578.2/663 = 87.2%(74.5%, 94.1%)

Communities of Color

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

401

2470/3982 = 62.0%(55.1%, 68.5%)

3377.9/3982 = 84.8%(78.8%, 89.4%)

3132.5/3982 = 78.7%(72.2%, 83.9%)

Communities of Color

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

110

369.6/488 = 75.7%(63.9%, 84.6%)

458.6/488 = 94.0%(85.4%, 97.7%)

441.1/488 = 90.4%(81.3%, 95.3%)

Communities of Color

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

65

0/1009.6 = 0.0%(0.0%, 0.0%)

6.5/1009.6 = 0.6%(0.1%, 4.6%)

0/1009.6 = 0.0%(0.0%, 0.0%)

Communities of Color

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

125

235/459 = 51.2%(40.4%, 61.9%)

390.6/459 = 85.1%(75.1%, 91.5%)

304.9/459 = 66.4%(55.2%, 76.1%)

Communities of Color

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

401

3747.2/3982 = 94.1%(89.7%, 96.7%)

3907/3982 = 98.1%(94.7%, 99.3%)

3831/3982 = 96.2%(92.2%, 98.2%)

Communities of Color

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

110

467.2/488 = 95.7%(86.2%, 98.8%)

485.2/488 = 99.4%(95.9%, 99.9%)

485.2/488 = 99.4%(95.9%, 99.9%)

Communities of Color

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

65

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

Communities of Color

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

125

385.1/459 = 83.9%(73.5%, 90.7%)

449.4/459 = 97.9%(89.7%, 99.6%)

434.8/459 = 94.7%(86.8%, 98.0%)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

114

1217.7/1816.2 = 67.0%(54.1%, 77.8%)

1595.7/1816.2 = 87.9%(75.7%, 94.4%)

1439.3/1816.2 = 79.2%(66.7%, 87.9%)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

51

198.4/264.7 = 75.0%(52.4%, 89.1%)

261.2/264.7 = 98.7%(90.6%, 99.8%)

223.7/264.7 = 84.5%(60.9%, 95.0%)

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

24

0/337.1 = 0.0%(0.0%, 0.0%)

7.5/337.1 = 2.2%(0.3%, 16.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

33

106.2/215.3 = 49.3%(27.1%, 71.8%)

178.4/215.3 = 82.9%(55.0%, 95.0%)

142.3/215.3 = 66.1%(40.1%, 85.0%)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

114

1730.5/1816.2 = 95.3%(86.7%, 98.4%)

1805.2/1816.2 = 99.4%(95.7%, 99.9%)

1787/1816.2 = 98.4%(95.0%, 99.5%)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

51

243/264.7 = 91.8%(68.3%, 98.3%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

248.9/264.7 = 94.0%(65.0%, 99.3%)

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

24

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

33

179.2/215.3 = 83.2%(55.0%, 95.3%)

196.8/215.3 = 91.4%(62.1%, 98.6%)

179.2/215.3 = 83.2%(55.0%, 95.3%)

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

Table 3j. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, Race and ethnic group

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Age, Race and ethnic group

Age < 65 Communities of Color

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

184

1773.4/3137.5 = 56.5%(48.0%, 64.7%)

2564.5/3137.5 = 81.7%(74.2%, 87.5%)

2346.3/3137.5 = 74.8%(66.7%, 81.4%)

Age < 65 Communities of Color

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

61

282.3/395 = 71.5%(57.1%, 82.5%)

365.6/395 = 92.6%(82.0%, 97.1%)

348.1/395 = 88.1%(77.0%, 94.3%)

Age < 65 Communities of Color

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

30

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

Age < 65 Communities of Color

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

71

162.8/359 = 45.4%(32.4%, 59.0%)

294.3/359 = 82.0%(69.4%, 90.1%)

219.8/359 = 61.2%(47.3%, 73.5%)

Age < 65 Communities of Color

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

184

2926.1/3137.5 = 93.3%(87.6%, 96.4%)

3062.5/3137.5 = 97.6%(93.3%, 99.2%)

2994.3/3137.5 = 95.4%(90.3%, 97.9%)

Age < 65 Communities of Color

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

61

374.2/395 = 94.7%(83.0%, 98.5%)

392.2/395 = 99.3%(94.8%, 99.9%)

392.2/395 = 99.3%(94.8%, 99.9%)

Age < 65 Communities of Color

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

30

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

Age < 65 Communities of Color

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

71

288.8/359 = 80.4%(67.4%, 89.1%)

351.2/359 = 97.8%(85.5%, 99.7%)

336.7/359 = 93.8%(83.5%, 97.8%)

Age < 65 NA

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

57

897.7/1410.9 = 63.6%(47.4%, 77.3%)

1197.6/1410.9 = 84.9%(69.4%, 93.3%)

1090.9/1410.9 = 77.3%(61.1%, 88.1%)

Age < 65 NA

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

28

147.5/208.9 = 70.6%(42.9%, 88.5%)

205.4/208.9 = 98.3%(87.8%, 99.8%)

170.3/208.9 = 81.5%(52.1%, 94.7%)

Age < 65 NA

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

13

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

Age < 65 NA

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

17

70.4/174.4 = 40.4%(15.9%, 70.8%)

137.6/174.4 = 78.9%(45.2%, 94.4%)

104/174.4 = 59.6%(29.2%, 84.1%)

Age < 65 NA

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

57

1346.6/1410.9 = 95.4%(82.8%, 98.9%)

1399.9/1410.9 = 99.2%(94.4%, 99.9%)

1388.9/1410.9 = 98.4%(93.9%, 99.6%)

Age < 65 NA

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

28

189.6/208.9 = 90.8%(59.6%, 98.5%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

193.2/208.9 = 92.4%(57.0%, 99.1%)

Age < 65 NA

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

13

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

Age < 65 NA

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

17

140.9/174.4 = 80.8%(45.7%, 95.4%)

156/174.4 = 89.4%(53.4%, 98.4%)

140.9/174.4 = 80.8%(45.7%, 95.4%)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

191

3342.5/5204.1 = 64.2%(56.1%, 71.6%)

4711.1/5204.1 = 90.5%(84.8%, 94.2%)

4271.5/5204.1 = 82.1%(75.2%, 87.3%)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

56

389.6/528.2 = 73.8%(57.3%, 85.5%)

508.9/528.2 = 96.3%(82.2%, 99.3%)

482.6/528.2 = 91.4%(77.9%, 96.9%)

Age < 65 White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

36

0/802.9 = 0.0%(0.0%, 0.0%)

38.5/802.9 = 4.8%(0.6%, 29.9%)

0/802.9 = 0.0%(0.0%, 0.0%)

Age < 65 White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

61

256.3/532.9 = 48.1%(33.1%, 63.5%)

413.8/532.9 = 77.6%(61.5%, 88.3%)

348.5/532.9 = 65.4%(49.3%, 78.6%)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

191

5020.2/5204.1 = 96.5%(92.8%, 98.3%)

5171/5204.1 = 99.4%(98.0%, 99.8%)

5126.9/5204.1 = 98.5%(97.0%, 99.3%)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

56

524.7/528.2 = 99.3%(95.2%, 99.9%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

528.2/528.2 = 100.0%(100.0%, 100.0%)

Age < 65 White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

36

0/802.9 = 0.0%(0.0%, 0.0%)

38.5/802.9 = 4.8%(0.6%, 29.9%)

0/802.9 = 0.0%(0.0%, 0.0%)

Age < 65 White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

61

432.2/532.9 = 81.1%(65.2%, 90.8%)

517.8/532.9 = 97.2%(81.4%, 99.6%)

450.6/532.9 = 84.6%(68.9%, 93.1%)

Age >= 65 Communities of Color

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

217

696.6/844.5 = 82.5%(76.8%, 87.0%)

813.4/844.5 = 96.3%(92.8%, 98.2%)

786.1/844.5 = 93.1%(88.8%, 95.8%)

Age >= 65 Communities of Color

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

49

87.3/93 = 93.9%(82.0%, 98.1%)

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

35

0/226.5 = 0.0%(0.0%, 0.0%)

6.5/226.5 = 2.9%(0.4%, 19.2%)

0/226.5 = 0.0%(0.0%, 0.0%)

Age >= 65 Communities of Color

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

54

72.2/100 = 72.2%(58.4%, 82.8%)

96.3/100 = 96.3%(85.8%, 99.1%)

85.2/100 = 85.2%(72.6%, 92.6%)

Age >= 65 Communities of Color

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

217

821.2/844.5 = 97.2%(93.9%, 98.8%)

844.5/844.5 = 100.0%(100.0%, 100.0%)

836.7/844.5 = 99.1%(96.4%, 99.8%)

Age >= 65 Communities of Color

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

49

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

Age >= 65 Communities of Color

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

35

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

Age >= 65 Communities of Color

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

54

96.3/100 = 96.3%(85.8%, 99.1%)

98.1/100 = 98.1%(87.3%, 99.8%)

98.1/100 = 98.1%(87.3%, 99.8%)

Age >= 65 NA

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

57

320/405.3 = 78.9%(66.0%, 87.9%)

398.2/405.3 = 98.2%(87.9%, 99.8%)

348.4/405.3 = 86.0%(73.9%, 93.0%)

Age >= 65 NA

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

23

50.9/55.8 = 91.3%(68.6%, 98.1%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

53.3/55.8 = 95.7%(71.6%, 99.5%)

Age >= 65 NA

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

11

0/82.2 = 0.0%(0.0%, 0.0%)

7.5/82.2 = 9.1%(0.9%, 53.7%)

0/82.2 = 0.0%(0.0%, 0.0%)

Age >= 65 NA

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

16

35.7/40.8 = 87.5%(57.0%, 97.4%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

38.3/40.8 = 93.7%(60.7%, 99.3%)

Age >= 65 NA

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

57

384/405.3 = 94.7%(84.4%, 98.4%)

405.3/405.3 = 100.0%(100.0%, 100.0%)

398.2/405.3 = 98.2%(87.9%, 99.8%)

Age >= 65 NA

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

23

53.3/55.8 = 95.7%(71.6%, 99.5%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

11

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

Age >= 65 NA

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

16

38.3/40.8 = 93.7%(60.7%, 99.3%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

38.3/40.8 = 93.7%(60.7%, 99.3%)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

198

1201.6/1407.8 = 85.4%(79.7%, 89.7%)

1372.3/1407.8 = 97.5%(94.0%, 99.0%)

1322.5/1407.8 = 93.9%(89.6%, 96.5%)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

56

118.8/135.8 = 87.5%(75.6%, 94.1%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

128.5/135.8 = 94.6%(84.2%, 98.3%)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

30

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

51

94.4/130.2 = 72.5%(58.3%, 83.3%)

117.4/130.2 = 90.2%(78.0%, 96.0%)

104.6/130.2 = 80.4%(66.7%, 89.3%)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

198

1358.1/1407.8 = 96.5%(92.7%, 98.3%)

1400.7/1407.8 = 99.5%(96.4%, 99.9%)

1393.6/1407.8 = 99.0%(96.0%, 99.8%)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

56

133.4/135.8 = 98.2%(87.7%, 99.8%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

135.8/135.8 = 100.0%(100.0%, 100.0%)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

30

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

51

125.1/130.2 = 96.1%(85.0%, 99.1%)

130.2/130.2 = 100.0%(100.0%, 100.0%)

127.6/130.2 = 98.0%(86.6%, 99.7%)

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

Table 4a. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by All participants

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

All participants

Day 29

Vaccine

Negative

Live virus-nAb MN50

904

6365.6/12410.2 = 51.3%(46.8%, 55.8%)

8136.9/12410.2 = 65.6%(61.1%, 69.7%)

6268.1/12410.2 = 50.5%(46.0%, 55.0%)

Day 29

Vaccine

Positive

Live virus-nAb MN50

273

871.3/1416.8 = 61.5%(53.3%, 69.1%)

1053.2/1416.8 = 74.3%(66.5%, 80.9%)

868.5/1416.8 = 61.3%(53.1%, 68.9%)

Day 29

Placebo

Negative

Live virus-nAb MN50

155

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

Day 29

Placebo

Positive

Live virus-nAb MN50

270

437.8/1337.3 = 32.7%(25.9%, 40.4%)

671.6/1337.3 = 50.2%(42.2%, 58.3%)

417.6/1337.3 = 31.2%(24.6%, 38.8%)

Day 57

Vaccine

Negative

Live virus-nAb MN50

904

10972.1/12410.2 = 88.4%(85.1%, 91.1%)

11702.9/12410.2 = 94.3%(91.8%, 96.1%)

10942.9/12410.2 = 88.2%(84.8%, 90.9%)

Day 57

Vaccine

Positive

Live virus-nAb MN50

273

1378.5/1416.8 = 97.3%(93.9%, 98.8%)

1401.8/1416.8 = 98.9%(96.1%, 99.7%)

1376.6/1416.8 = 97.2%(93.8%, 98.7%)

Day 57

Placebo

Negative

Live virus-nAb MN50

155

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

0/2373.7 = 0.0%(0.0%, 0.0%)

Day 57

Placebo

Positive

Live virus-nAb MN50

270

1006.4/1337.3 = 75.3%(67.2%, 81.9%)

1152.2/1337.3 = 86.2%(79.4%, 91.0%)

986.4/1337.3 = 73.8%(65.6%, 80.5%)

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

Table 4b. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Age

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Age

Age < 65

Day 29

Vaccine

Negative

Live virus-nAb MN50

432

4587.3/9752.5 = 47.0%(41.5%, 52.6%)

6081.5/9752.5 = 62.4%(56.8%, 67.6%)

4500.9/9752.5 = 46.2%(40.6%, 51.8%)

Age < 65

Day 29

Vaccine

Positive

Live virus-nAb MN50

145

646.1/1132.2 = 57.1%(47.0%, 66.6%)

805.3/1132.2 = 71.1%(61.4%, 79.2%)

643.3/1132.2 = 56.8%(46.8%, 66.3%)

Age < 65

Day 29

Placebo

Negative

Live virus-nAb MN50

79

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

Age < 65

Day 29

Placebo

Positive

Live virus-nAb MN50

149

299.2/1066.3 = 28.1%(20.0%, 37.8%)

488.9/1066.3 = 45.9%(36.2%, 55.9%)

284.1/1066.3 = 26.6%(18.9%, 36.2%)

Age < 65

Day 57

Vaccine

Negative

Live virus-nAb MN50

432

8482.7/9752.5 = 87.0%(82.8%, 90.3%)

9143.6/9752.5 = 93.8%(90.6%, 95.9%)

8471.6/9752.5 = 86.9%(82.6%, 90.2%)

Age < 65

Day 57

Vaccine

Positive

Live virus-nAb MN50

145

1098.8/1132.2 = 97.1%(92.6%, 98.9%)

1119.7/1132.2 = 98.9%(95.0%, 99.8%)

1098.8/1132.2 = 97.1%(92.6%, 98.9%)

Age < 65

Day 57

Placebo

Negative

Live virus-nAb MN50

79

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

0/1841 = 0.0%(0.0%, 0.0%)

Age < 65

Day 57

Placebo

Positive

Live virus-nAb MN50

149

763.2/1066.3 = 71.6%(61.6%, 79.8%)

896.2/1066.3 = 84.0%(75.5%, 90.0%)

745.8/1066.3 = 69.9%(59.9%, 78.4%)

Age >= 65

Day 29

Vaccine

Negative

Live virus-nAb MN50

472

1778.3/2657.6 = 66.9%(62.3%, 71.2%)

2055.4/2657.6 = 77.3%(73.1%, 81.1%)

1767.3/2657.6 = 66.5%(61.9%, 70.8%)

Age >= 65

Day 29

Vaccine

Positive

Live virus-nAb MN50

128

225.2/284.6 = 79.1%(71.0%, 85.5%)

247.9/284.6 = 87.1%(79.9%, 92.0%)

225.2/284.6 = 79.1%(71.0%, 85.5%)

Age >= 65

Day 29

Placebo

Negative

Live virus-nAb MN50

76

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

Age >= 65

Day 29

Placebo

Positive

Live virus-nAb MN50

121

138.6/271 = 51.2%(42.0%, 60.2%)

182.7/271 = 67.4%(58.3%, 75.4%)

133.5/271 = 49.3%(40.2%, 58.4%)

Age >= 65

Day 57

Vaccine

Negative

Live virus-nAb MN50

472

2489.4/2657.6 = 93.7%(91.0%, 95.6%)

2559.3/2657.6 = 96.3%(94.0%, 97.7%)

2471.3/2657.6 = 93.0%(90.2%, 95.0%)

Age >= 65

Day 57

Vaccine

Positive

Live virus-nAb MN50

128

279.7/284.6 = 98.3%(93.3%, 99.6%)

282.1/284.6 = 99.1%(94.1%, 99.9%)

277.8/284.6 = 97.6%(92.7%, 99.3%)

Age >= 65

Day 57

Placebo

Negative

Live virus-nAb MN50

76

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

0/532.8 = 0.0%(0.0%, 0.0%)

Age >= 65

Day 57

Placebo

Positive

Live virus-nAb MN50

121

243.2/271 = 89.7%(82.6%, 94.2%)

255.9/271 = 94.4%(88.6%, 97.4%)

240.6/271 = 88.8%(81.5%, 93.5%)

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

Table 4c. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Risk for Severe Covid-19

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Risk for Severe Covid-19

At-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

460

1738.7/3348.4 = 51.9%(47.1%, 56.7%)

2159.1/3348.4 = 64.5%(59.7%, 69.0%)

1690.6/3348.4 = 50.5%(45.7%, 55.3%)

At-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

126

244.6/359.5 = 68.0%(59.0%, 75.9%)

262.1/359.5 = 72.9%(64.1%, 80.2%)

241.7/359.5 = 67.2%(58.2%, 75.1%)

At-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

78

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

At-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

120

113.8/314.6 = 36.2%(27.8%, 45.5%)

168.2/314.6 = 53.5%(44.1%, 62.5%)

111.2/314.6 = 35.4%(27.0%, 44.7%)

At-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

460

2976.4/3348.4 = 88.9%(85.3%, 91.7%)

3140.6/3348.4 = 93.8%(90.8%, 95.9%)

2954.3/3348.4 = 88.2%(84.6%, 91.1%)

At-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

126

350.7/359.5 = 97.6%(92.4%, 99.2%)

353.6/359.5 = 98.3%(93.3%, 99.6%)

350.7/359.5 = 97.6%(92.4%, 99.2%)

At-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

78

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

0/590.5 = 0.0%(0.0%, 0.0%)

At-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

120

248.8/314.6 = 79.1%(70.4%, 85.7%)

280.5/314.6 = 89.2%(81.7%, 93.8%)

246.5/314.6 = 78.4%(69.6%, 85.1%)

Not at-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

444

4626.9/9061.8 = 51.1%(45.2%, 56.9%)

5977.8/9061.8 = 66.0%(60.1%, 71.4%)

4577.5/9061.8 = 50.5%(44.6%, 56.4%)

Not at-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

147

626.7/1057.2 = 59.3%(48.6%, 69.1%)

791/1057.2 = 74.8%(64.4%, 83.0%)

626.7/1057.2 = 59.3%(48.6%, 69.1%)

Not at-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

77

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

Not at-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

150

324/1022.7 = 31.7%(23.3%, 41.5%)

503.4/1022.7 = 49.2%(39.1%, 59.4%)

306.4/1022.7 = 30.0%(21.8%, 39.6%)

Not at-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

444

7995.7/9061.8 = 88.2%(83.7%, 91.6%)

8562.4/9061.8 = 94.5%(91.1%, 96.6%)

7988.6/9061.8 = 88.2%(83.6%, 91.6%)

Not at-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

147

1027.8/1057.2 = 97.2%(92.4%, 99.0%)

1048.2/1057.2 = 99.1%(94.1%, 99.9%)

1025.9/1057.2 = 97.0%(92.3%, 98.9%)

Not at-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

77

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

0/1783.2 = 0.0%(0.0%, 0.0%)

Not at-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

150

757.6/1022.7 = 74.1%(63.7%, 82.3%)

871.6/1022.7 = 85.2%(76.3%, 91.2%)

739.9/1022.7 = 72.3%(61.9%, 80.8%)

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

Table 4d. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Age, Risk for Severe Covid-19

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Age, Risk for Severe Covid-19

Age < 65 At-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

216

881.2/1993.3 = 44.2%(37.5%, 51.1%)

1149.5/1993.3 = 57.7%(50.8%, 64.3%)

837/1993.3 = 42.0%(35.4%, 48.9%)

Age < 65 At-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

73

148.2/240 = 61.8%(49.8%, 72.5%)

160.9/240 = 67.1%(55.1%, 77.1%)

145.4/240 = 60.6%(48.6%, 71.4%)

Age < 65 At-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

39

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

Age < 65 At-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

75

70.2/211.7 = 33.2%(23.1%, 45.1%)

107/211.7 = 50.5%(38.9%, 62.1%)

70.2/211.7 = 33.2%(23.1%, 45.1%)

Age < 65 At-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

216

1713.1/1993.3 = 85.9%(80.4%, 90.1%)

1829.4/1993.3 = 91.8%(86.9%, 94.9%)

1702.1/1993.3 = 85.4%(79.8%, 89.7%)

Age < 65 At-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

73

233.6/240 = 97.3%(89.5%, 99.4%)

236.4/240 = 98.5%(89.9%, 99.8%)

233.6/240 = 97.3%(89.5%, 99.4%)

Age < 65 At-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

39

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

0/318.2 = 0.0%(0.0%, 0.0%)

Age < 65 At-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

75

160.5/211.7 = 75.8%(64.3%, 84.5%)

179.4/211.7 = 84.8%(74.1%, 91.6%)

158.2/211.7 = 74.7%(63.2%, 83.6%)

Age < 65 Not at-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

216

3706.1/7759.3 = 47.8%(41.0%, 54.6%)

4932/7759.3 = 63.6%(56.8%, 69.8%)

3663.8/7759.3 = 47.2%(40.5%, 54.1%)

Age < 65 Not at-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

72

497.9/892.2 = 55.8%(43.4%, 67.5%)

644.4/892.2 = 72.2%(60.0%, 81.9%)

497.9/892.2 = 55.8%(43.4%, 67.5%)

Age < 65 Not at-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

40

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

Age < 65 Not at-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

74

229/854.6 = 26.8%(17.4%, 38.9%)

382/854.6 = 44.7%(33.0%, 57.0%)

213.9/854.6 = 25.0%(16.0%, 37.0%)

Age < 65 Not at-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

216

6769.5/7759.3 = 87.2%(82.0%, 91.2%)

7314.2/7759.3 = 94.3%(90.2%, 96.7%)

6769.5/7759.3 = 87.2%(82.0%, 91.2%)

Age < 65 Not at-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

72

865.2/892.2 = 97.0%(91.0%, 99.0%)

883.2/892.2 = 99.0%(92.9%, 99.9%)

865.2/892.2 = 97.0%(91.0%, 99.0%)

Age < 65 Not at-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

40

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

0/1522.8 = 0.0%(0.0%, 0.0%)

Age < 65 Not at-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

74

602.7/854.6 = 70.5%(58.2%, 80.4%)

716.8/854.6 = 83.9%(73.1%, 90.9%)

587.6/854.6 = 68.8%(56.4%, 78.9%)

Age >= 65 At-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

244

857.5/1355.1 = 63.3%(56.7%, 69.4%)

1009.6/1355.1 = 74.5%(68.3%, 79.9%)

853.6/1355.1 = 63.0%(56.4%, 69.1%)

Age >= 65 At-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

53

96.4/119.6 = 80.6%(67.0%, 89.5%)

101.2/119.6 = 84.7%(71.5%, 92.4%)

96.4/119.6 = 80.6%(67.0%, 89.5%)

Age >= 65 At-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

39

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

Age >= 65 At-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

45

43.6/102.9 = 42.3%(28.1%, 57.9%)

61.2/102.9 = 59.5%(43.8%, 73.4%)

41/102.9 = 39.9%(26.0%, 55.5%)

Age >= 65 At-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

244

1263.2/1355.1 = 93.2%(89.1%, 95.8%)

1311.1/1355.1 = 96.8%(93.4%, 98.4%)

1252.2/1355.1 = 92.4%(88.1%, 95.2%)

Age >= 65 At-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

53

117.1/119.6 = 98.0%(86.2%, 99.7%)

117.1/119.6 = 98.0%(86.2%, 99.7%)

117.1/119.6 = 98.0%(86.2%, 99.7%)

Age >= 65 At-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

39

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

0/272.3 = 0.0%(0.0%, 0.0%)

Age >= 65 At-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

45

88.3/102.9 = 85.8%(71.1%, 93.7%)

101.1/102.9 = 98.2%(87.5%, 99.8%)

88.3/102.9 = 85.8%(71.1%, 93.7%)

Age >= 65 Not at-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

228

920.8/1302.5 = 70.7%(64.1%, 76.5%)

1045.7/1302.5 = 80.3%(74.2%, 85.2%)

913.7/1302.5 = 70.1%(63.5%, 76.0%)

Age >= 65 Not at-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

75

128.8/165 = 78.1%(66.9%, 86.3%)

146.7/165 = 88.9%(79.0%, 94.4%)

128.8/165 = 78.1%(66.9%, 86.3%)

Age >= 65 Not at-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

37

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

Age >= 65 Not at-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

76

95/168.1 = 56.6%(44.8%, 67.6%)

121.5/168.1 = 72.3%(60.7%, 81.5%)

92.5/168.1 = 55.0%(43.3%, 66.2%)

Age >= 65 Not at-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

228

1226.2/1302.5 = 94.1%(89.9%, 96.6%)

1248.2/1302.5 = 95.8%(92.0%, 97.9%)

1219.1/1302.5 = 93.6%(89.3%, 96.3%)

Age >= 65 Not at-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

75

162.6/165 = 98.5%(89.9%, 99.8%)

165/165 = 100.0%(100.0%, 100.0%)

160.7/165 = 97.4%(89.6%, 99.4%)

Age >= 65 Not at-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

37

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

0/260.4 = 0.0%(0.0%, 0.0%)

Age >= 65 Not at-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

76

154.8/168.1 = 92.1%(83.1%, 96.5%)

154.8/168.1 = 92.1%(83.1%, 96.5%)

152.3/168.1 = 90.6%(81.1%, 95.6%)

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

Table 4e. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Sex

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Sex

Female

Day 29

Vaccine

Negative

Live virus-nAb MN50

511

3490.9/6958.3 = 50.2%(44.2%, 56.1%)

4562.5/6958.3 = 65.6%(59.6%, 71.1%)

3430.4/6958.3 = 49.3%(43.3%, 55.3%)

Female

Day 29

Vaccine

Positive

Live virus-nAb MN50

149

462.4/763.9 = 60.5%(49.4%, 70.7%)

552/763.9 = 72.3%(61.0%, 81.3%)

462.4/763.9 = 60.5%(49.4%, 70.7%)

Female

Day 29

Placebo

Negative

Live virus-nAb MN50

85

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

Female

Day 29

Placebo

Positive

Live virus-nAb MN50

149

223.5/800.5 = 27.9%(19.7%, 38.0%)

393.5/800.5 = 49.2%(38.4%, 60.0%)

221/800.5 = 27.6%(19.4%, 37.7%)

Female

Day 57

Vaccine

Negative

Live virus-nAb MN50

511

6083/6958.3 = 87.4%(82.6%, 91.0%)

6510.3/6958.3 = 93.6%(89.8%, 96.0%)

6075.8/6958.3 = 87.3%(82.5%, 90.9%)

Female

Day 57

Vaccine

Positive

Live virus-nAb MN50

149

751.4/763.9 = 98.4%(92.7%, 99.6%)

760.4/763.9 = 99.5%(96.7%, 99.9%)

749.5/763.9 = 98.1%(92.9%, 99.5%)

Female

Day 57

Placebo

Negative

Live virus-nAb MN50

85

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

0/1307.2 = 0.0%(0.0%, 0.0%)

Female

Day 57

Placebo

Positive

Live virus-nAb MN50

149

570.9/800.5 = 71.3%(59.9%, 80.5%)

672.3/800.5 = 84.0%(74.0%, 90.6%)

553.5/800.5 = 69.1%(57.7%, 78.6%)

Male

Day 29

Vaccine

Negative

Live virus-nAb MN50

393

2874.7/5451.9 = 52.7%(45.9%, 59.5%)

3574.3/5451.9 = 65.6%(58.7%, 71.8%)

2837.7/5451.9 = 52.1%(45.2%, 58.8%)

Male

Day 29

Vaccine

Positive

Live virus-nAb MN50

124

408.9/652.9 = 62.6%(50.0%, 73.7%)

501.2/652.9 = 76.8%(64.8%, 85.6%)

406/652.9 = 62.2%(49.6%, 73.3%)

Male

Day 29

Placebo

Negative

Live virus-nAb MN50

70

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

Male

Day 29

Placebo

Positive

Live virus-nAb MN50

121

214.3/536.8 = 39.9%(28.9%, 52.1%)

278.1/536.8 = 51.8%(39.7%, 63.7%)

196.7/536.8 = 36.6%(26.1%, 48.7%)

Male

Day 57

Vaccine

Negative

Live virus-nAb MN50

393

4889.1/5451.9 = 89.7%(84.6%, 93.2%)

5192.7/5451.9 = 95.2%(91.5%, 97.4%)

4867.1/5451.9 = 89.3%(84.2%, 92.9%)

Male

Day 57

Vaccine

Positive

Live virus-nAb MN50

124

627.2/652.9 = 96.1%(89.6%, 98.6%)

641.4/652.9 = 98.3%(91.6%, 99.7%)

627.2/652.9 = 96.1%(89.6%, 98.6%)

Male

Day 57

Placebo

Negative

Live virus-nAb MN50

70

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

0/1066.6 = 0.0%(0.0%, 0.0%)

Male

Day 57

Placebo

Positive

Live virus-nAb MN50

121

435.5/536.8 = 81.1%(69.3%, 89.1%)

479.9/536.8 = 89.4%(79.0%, 95.0%)

432.9/536.8 = 80.6%(68.9%, 88.7%)

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

Table 4f. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Age, sex

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Age, sex

Age < 65 Female

Day 29

Vaccine

Negative

Live virus-nAb MN50

245

2509.2/5478.9 = 45.8%(38.5%, 53.3%)

3407.3/5478.9 = 62.2%(54.8%, 69.1%)

2455.8/5478.9 = 44.8%(37.5%, 52.4%)

Age < 65 Female

Day 29

Vaccine

Positive

Live virus-nAb MN50

77

330.4/603.5 = 54.8%(41.2%, 67.6%)

408.9/603.5 = 67.8%(53.8%, 79.1%)

330.4/603.5 = 54.8%(41.2%, 67.6%)

Age < 65 Female

Day 29

Placebo

Negative

Live virus-nAb MN50

45

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

Age < 65 Female

Day 29

Placebo

Positive

Live virus-nAb MN50

89

167/667 = 25.0%(15.8%, 37.3%)

311.2/667 = 46.7%(34.2%, 59.6%)

167/667 = 25.0%(15.8%, 37.3%)

Age < 65 Female

Day 57

Vaccine

Negative

Live virus-nAb MN50

245

4709.7/5478.9 = 86.0%(79.9%, 90.4%)

5100.1/5478.9 = 93.1%(88.2%, 96.0%)

4709.7/5478.9 = 86.0%(79.9%, 90.4%)

Age < 65 Female

Day 57

Vaccine

Positive

Live virus-nAb MN50

77

591/603.5 = 97.9%(90.8%, 99.6%)

600/603.5 = 99.4%(95.8%, 99.9%)

591/603.5 = 97.9%(90.8%, 99.6%)

Age < 65 Female

Day 57

Placebo

Negative

Live virus-nAb MN50

45

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

0/1028.3 = 0.0%(0.0%, 0.0%)

Age < 65 Female

Day 57

Placebo

Positive

Live virus-nAb MN50

89

452/667 = 67.8%(54.3%, 78.8%)

543.2/667 = 81.4%(69.5%, 89.4%)

434.6/667 = 65.2%(51.7%, 76.6%)

Age < 65 Male

Day 29

Vaccine

Negative

Live virus-nAb MN50

187

2078.1/4273.6 = 48.6%(40.2%, 57.1%)

2674.2/4273.6 = 62.6%(54.1%, 70.4%)

2045/4273.6 = 47.9%(39.5%, 56.4%)

Age < 65 Male

Day 29

Vaccine

Positive

Live virus-nAb MN50

68

315.7/528.7 = 59.7%(44.5%, 73.2%)

396.4/528.7 = 75.0%(60.2%, 85.6%)

312.8/528.7 = 59.2%(44.0%, 72.8%)

Age < 65 Male

Day 29

Placebo

Negative

Live virus-nAb MN50

34

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

Age < 65 Male

Day 29

Placebo

Positive

Live virus-nAb MN50

60

132.3/399.3 = 33.1%(19.7%, 49.9%)

177.7/399.3 = 44.5%(29.5%, 60.6%)

117.1/399.3 = 29.3%(16.8%, 46.1%)

Age < 65 Male

Day 57

Vaccine

Negative

Live virus-nAb MN50

187

3773/4273.6 = 88.3%(81.7%, 92.7%)

4043.5/4273.6 = 94.6%(89.8%, 97.2%)

3761.9/4273.6 = 88.0%(81.5%, 92.5%)

Age < 65 Male

Day 57

Vaccine

Positive

Live virus-nAb MN50

68

507.8/528.7 = 96.1%(87.4%, 98.8%)

519.7/528.7 = 98.3%(88.3%, 99.8%)

507.8/528.7 = 96.1%(87.4%, 98.8%)

Age < 65 Male

Day 57

Placebo

Negative

Live virus-nAb MN50

34

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

0/812.7 = 0.0%(0.0%, 0.0%)

Age < 65 Male

Day 57

Placebo

Positive

Live virus-nAb MN50

60

311.2/399.3 = 77.9%(62.2%, 88.3%)

353/399.3 = 88.4%(74.0%, 95.3%)

311.2/399.3 = 77.9%(62.2%, 88.3%)

Age >= 65 Female

Day 29

Vaccine

Negative

Live virus-nAb MN50

266

981.7/1479.4 = 66.4%(60.2%, 72.0%)

1155.2/1479.4 = 78.1%(72.4%, 82.9%)

974.6/1479.4 = 65.9%(59.7%, 71.6%)

Age >= 65 Female

Day 29

Vaccine

Positive

Live virus-nAb MN50

72

132/160.4 = 82.3%(71.4%, 89.7%)

143.1/160.4 = 89.2%(79.4%, 94.7%)

132/160.4 = 82.3%(71.4%, 89.7%)

Age >= 65 Female

Day 29

Placebo

Negative

Live virus-nAb MN50

40

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

Age >= 65 Female

Day 29

Placebo

Positive

Live virus-nAb MN50

60

56.6/133.5 = 42.4%(30.1%, 55.6%)

82.3/133.5 = 61.6%(48.4%, 73.3%)

54/133.5 = 40.4%(28.5%, 53.7%)

Age >= 65 Female

Day 57

Vaccine

Negative

Live virus-nAb MN50

266

1373.2/1479.4 = 92.8%(88.8%, 95.5%)

1410.1/1479.4 = 95.3%(91.7%, 97.4%)

1366.1/1479.4 = 92.3%(88.2%, 95.1%)

Age >= 65 Female

Day 57

Vaccine

Positive

Live virus-nAb MN50

72

160.4/160.4 = 100.0%(100.0%, 100.0%)

160.4/160.4 = 100.0%(100.0%, 100.0%)

158.5/160.4 = 98.8%(91.7%, 99.8%)

Age >= 65 Female

Day 57

Placebo

Negative

Live virus-nAb MN50

40

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

0/278.8 = 0.0%(0.0%, 0.0%)

Age >= 65 Female

Day 57

Placebo

Positive

Live virus-nAb MN50

60

118.9/133.5 = 89.1%(77.4%, 95.1%)

129.1/133.5 = 96.7%(86.9%, 99.2%)

118.9/133.5 = 89.1%(77.4%, 95.1%)

Age >= 65 Male

Day 29

Vaccine

Negative

Live virus-nAb MN50

206

796.6/1178.3 = 67.6%(60.5%, 73.9%)

900.1/1178.3 = 76.4%(69.7%, 82.0%)

792.7/1178.3 = 67.3%(60.2%, 73.6%)

Age >= 65 Male

Day 29

Vaccine

Positive

Live virus-nAb MN50

56

93.2/124.2 = 75.0%(62.0%, 84.7%)

104.8/124.2 = 84.4%(71.9%, 91.9%)

93.2/124.2 = 75.0%(62.0%, 84.7%)

Age >= 65 Male

Day 29

Placebo

Negative

Live virus-nAb MN50

36

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

Age >= 65 Male

Day 29

Placebo

Positive

Live virus-nAb MN50

61

82.1/137.5 = 59.7%(46.5%, 71.6%)

100.4/137.5 = 73.0%(60.2%, 82.9%)

79.5/137.5 = 57.8%(44.6%, 70.0%)

Age >= 65 Male

Day 57

Vaccine

Negative

Live virus-nAb MN50

206

1116.2/1178.3 = 94.7%(90.5%, 97.1%)

1149.2/1178.3 = 97.5%(94.0%, 99.0%)

1105.1/1178.3 = 93.8%(89.3%, 96.5%)

Age >= 65 Male

Day 57

Vaccine

Positive

Live virus-nAb MN50

56

119.4/124.2 = 96.1%(85.2%, 99.1%)

121.8/124.2 = 98.0%(86.7%, 99.7%)

119.4/124.2 = 96.1%(85.2%, 99.1%)

Age >= 65 Male

Day 57

Placebo

Negative

Live virus-nAb MN50

36

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

0/253.9 = 0.0%(0.0%, 0.0%)

Age >= 65 Male

Day 57

Placebo

Positive

Live virus-nAb MN50

61

124.3/137.5 = 90.4%(79.5%, 95.8%)

126.8/137.5 = 92.2%(82.0%, 96.9%)

121.7/137.5 = 88.5%(77.2%, 94.6%)

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

Table 4g. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Hispanic or Latino ethnicity

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Hispanic or Latino ethnicity

Hispanic or Latino

Day 29

Vaccine

Negative

Live virus-nAb MN50

112

406.9/1003.1 = 40.6%(29.1%, 53.2%)

568.7/1003.1 = 56.7%(43.2%, 69.2%)

406.9/1003.1 = 40.6%(29.1%, 53.2%)

Hispanic or Latino

Day 29

Vaccine

Positive

Live virus-nAb MN50

38

128.9/181.5 = 71.0%(48.9%, 86.3%)

148.8/181.5 = 82.0%(59.6%, 93.3%)

128.9/181.5 = 71.0%(48.9%, 86.3%)

Hispanic or Latino

Day 29

Placebo

Negative

Live virus-nAb MN50

20

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

Hispanic or Latino

Day 29

Placebo

Positive

Live virus-nAb MN50

45

49/166.7 = 29.4%(15.9%, 47.8%)

74.9/166.7 = 44.9%(27.9%, 63.3%)

49/166.7 = 29.4%(15.9%, 47.8%)

Hispanic or Latino

Day 57

Vaccine

Negative

Live virus-nAb MN50

112

867.6/1003.1 = 86.5%(72.8%, 93.9%)

964.1/1003.1 = 96.1%(84.8%, 99.1%)

867.6/1003.1 = 86.5%(72.8%, 93.9%)

Hispanic or Latino

Day 57

Vaccine

Positive

Live virus-nAb MN50

38

172.5/181.5 = 95.0%(69.3%, 99.4%)

181.5/181.5 = 100.0%(100.0%, 100.0%)

172.5/181.5 = 95.0%(69.3%, 99.4%)

Hispanic or Latino

Day 57

Placebo

Negative

Live virus-nAb MN50

20

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

0/323.2 = 0.0%(0.0%, 0.0%)

Hispanic or Latino

Day 57

Placebo

Positive

Live virus-nAb MN50

45

136.6/166.7 = 81.9%(61.4%, 92.8%)

148.9/166.7 = 89.3%(68.0%, 97.0%)

134.4/166.7 = 80.6%(60.4%, 91.9%)

Not Hispanic or Latino

Day 29

Vaccine

Negative

Live virus-nAb MN50

723

5431.9/10413.1 = 52.2%(47.2%, 57.1%)

6927.7/10413.1 = 66.5%(61.6%, 71.1%)

5338.4/10413.1 = 51.3%(46.3%, 56.2%)

Not Hispanic or Latino

Day 29

Vaccine

Positive

Live virus-nAb MN50

208

638.9/1083.5 = 59.0%(49.4%, 67.9%)

795.6/1083.5 = 73.4%(64.3%, 80.9%)

636/1083.5 = 58.7%(49.1%, 67.7%)

Not Hispanic or Latino

Day 29

Placebo

Negative

Live virus-nAb MN50

119

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

Not Hispanic or Latino

Day 29

Placebo

Positive

Live virus-nAb MN50

198

348.7/1016.5 = 34.3%(26.1%, 43.5%)

508.5/1016.5 = 50.0%(40.6%, 59.4%)

328.5/1016.5 = 32.3%(24.4%, 41.4%)

Not Hispanic or Latino

Day 57

Vaccine

Negative

Live virus-nAb MN50

723

9209.3/10413.1 = 88.4%(84.7%, 91.3%)

9832.7/10413.1 = 94.4%(91.7%, 96.3%)

9191.2/10413.1 = 88.3%(84.6%, 91.2%)

Not Hispanic or Latino

Day 57

Vaccine

Positive

Live virus-nAb MN50

208

1054.3/1083.5 = 97.3%(93.3%, 98.9%)

1068.5/1083.5 = 98.6%(95.0%, 99.6%)

1052.4/1083.5 = 97.1%(93.2%, 98.8%)

Not Hispanic or Latino

Day 57

Placebo

Negative

Live virus-nAb MN50

119

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

0/1750.4 = 0.0%(0.0%, 0.0%)

Not Hispanic or Latino

Day 57

Placebo

Positive

Live virus-nAb MN50

198

783.6/1016.5 = 77.1%(67.8%, 84.3%)

886.9/1016.5 = 87.2%(79.2%, 92.5%)

768.5/1016.5 = 75.6%(66.1%, 83.1%)

Not reported and unknown

Day 29

Vaccine

Negative

Live virus-nAb MN50

69

526.8/994 = 53.0%(35.8%, 69.5%)

640.5/994 = 64.4%(46.4%, 79.2%)

522.9/994 = 52.6%(35.4%, 69.2%)

Not reported and unknown

Day 29

Vaccine

Positive

Live virus-nAb MN50

27

103.5/151.8 = 68.2%(35.2%, 89.5%)

108.8/151.8 = 71.7%(37.3%, 91.5%)

103.5/151.8 = 68.2%(35.2%, 89.5%)

Not reported and unknown

Day 29

Placebo

Negative

Live virus-nAb MN50

16

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 29

Placebo

Positive

Live virus-nAb MN50

27

40.1/154.1 = 26.0%(9.3%, 54.7%)

88.2/154.1 = 57.2%(29.5%, 81.0%)

40.1/154.1 = 26.0%(9.3%, 54.7%)

Not reported and unknown

Day 57

Vaccine

Negative

Live virus-nAb MN50

69

895.2/994 = 90.1%(73.4%, 96.8%)

906.2/994 = 91.2%(73.8%, 97.4%)

884.1/994 = 88.9%(72.8%, 96.0%)

Not reported and unknown

Day 57

Vaccine

Positive

Live virus-nAb MN50

27

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

151.8/151.8 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Placebo

Negative

Live virus-nAb MN50

16

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

0/300.1 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 57

Placebo

Positive

Live virus-nAb MN50

27

86.1/154.1 = 55.9%(29.1%, 79.7%)

116.4/154.1 = 75.5%(49.7%, 90.6%)

83.6/154.1 = 54.3%(27.7%, 78.6%)

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

Table 4h. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Race

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Race

Not reported and unknown

Day 29

Vaccine

Negative

Live virus-nAb MN50

82

670.4/1261.1 = 53.2%(38.2%, 67.6%)

784.2/1261.1 = 62.2%(46.6%, 75.6%)

652.2/1261.1 = 51.7%(36.8%, 66.3%)

Not reported and unknown

Day 29

Vaccine

Positive

Live virus-nAb MN50

29

87.5/138 = 63.4%(33.1%, 85.8%)

106.8/138 = 77.4%(44.5%, 93.6%)

87.5/138 = 63.4%(33.1%, 85.8%)

Not reported and unknown

Day 29

Placebo

Negative

Live virus-nAb MN50

16

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 29

Placebo

Positive

Live virus-nAb MN50

19

36.4/120.5 = 30.2%(10.0%, 62.8%)

57.4/120.5 = 47.6%(18.5%, 78.4%)

33.8/120.5 = 28.1%(8.5%, 62.0%)

Not reported and unknown

Day 57

Vaccine

Negative

Live virus-nAb MN50

82

1185.7/1261.1 = 94.0%(81.2%, 98.3%)

1239/1261.1 = 98.2%(93.3%, 99.6%)

1178.5/1261.1 = 93.5%(81.1%, 97.9%)

Not reported and unknown

Day 57

Vaccine

Positive

Live virus-nAb MN50

29

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

138/138 = 100.0%(100.0%, 100.0%)

Not reported and unknown

Day 57

Placebo

Negative

Live virus-nAb MN50

16

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

0/214.9 = 0.0%(0.0%, 0.0%)

Not reported and unknown

Day 57

Placebo

Positive

Live virus-nAb MN50

19

94.2/120.5 = 78.2%(38.7%, 95.3%)

120.5/120.5 = 100.0%(100.0%, 100.0%)

94.2/120.5 = 78.2%(38.7%, 95.3%)

American Indian or Alaska Native

Day 29

Vaccine

Negative

Live virus-nAb MN50

23

68.1/238.7 = 28.5%(10.3%, 58.2%)

121.7/238.7 = 51.0%(23.5%, 77.9%)

68.1/238.7 = 28.5%(10.3%, 58.2%)

American Indian or Alaska Native

Day 29

Vaccine

Positive

Live virus-nAb MN50

8

32.7/44.5 = 73.4%(15.2%, 97.7%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

32.7/44.5 = 73.4%(15.2%, 97.7%)

American Indian or Alaska Native

Day 29

Placebo

Negative

Live virus-nAb MN50

4

0/59.5 = 0.0%

0/59.5 = 0.0%

0/59.5 = 0.0%

American Indian or Alaska Native

Day 29

Placebo

Positive

Live virus-nAb MN50

9

10.1/24.2 = 41.6%(9.7%, 82.5%)

11.9/24.2 = 49.2%(13.0%, 86.3%)

10.1/24.2 = 41.6%(9.7%, 82.5%)

American Indian or Alaska Native

Day 57

Vaccine

Negative

Live virus-nAb MN50

23

234.8/238.7 = 98.4%(87.9%, 99.8%)

238.7/238.7 = 100.0%(100.0%, 100.0%)

234.8/238.7 = 98.4%(87.9%, 99.8%)

American Indian or Alaska Native

Day 57

Vaccine

Positive

Live virus-nAb MN50

8

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

44.5/44.5 = 100.0%(100.0%, 100.0%)

American Indian or Alaska Native

Day 57

Placebo

Negative

Live virus-nAb MN50

4

0/59.5 = 0.0%

0/59.5 = 0.0%

0/59.5 = 0.0%

American Indian or Alaska Native

Day 57

Placebo

Positive

Live virus-nAb MN50

9

22/24.2 = 90.7%(36.4%, 99.4%)

24.2/24.2 = 100.0%(100.0%, 100.0%)

22/24.2 = 90.7%(36.4%, 99.4%)

Asian

Day 29

Vaccine

Negative

Live virus-nAb MN50

72

375/724.7 = 51.7%(35.5%, 67.7%)

459.8/724.7 = 63.4%(46.2%, 77.8%)

375/724.7 = 51.7%(35.5%, 67.7%)

Asian

Day 29

Vaccine

Positive

Live virus-nAb MN50

24

47.4/105.2 = 45.1%(23.8%, 68.2%)

47.4/105.2 = 45.1%(23.8%, 68.2%)

47.4/105.2 = 45.1%(23.8%, 68.2%)

Asian

Day 29

Placebo

Negative

Live virus-nAb MN50

11

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

Asian

Day 29

Placebo

Positive

Live virus-nAb MN50

22

30.7/78.3 = 39.2%(16.0%, 68.6%)

59/78.3 = 75.4%(46.6%, 91.5%)

30.7/78.3 = 39.2%(16.0%, 68.6%)

Asian

Day 57

Vaccine

Negative

Live virus-nAb MN50

72

669.3/724.7 = 92.3%(79.0%, 97.5%)

711.2/724.7 = 98.1%(92.9%, 99.5%)

669.3/724.7 = 92.3%(79.0%, 97.5%)

Asian

Day 57

Vaccine

Positive

Live virus-nAb MN50

24

87.2/105.2 = 82.9%(48.4%, 96.2%)

96.2/105.2 = 91.4%(52.4%, 99.0%)

85.3/105.2 = 81.1%(47.9%, 95.2%)

Asian

Day 57

Placebo

Negative

Live virus-nAb MN50

11

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

0/135.8 = 0.0%(0.0%, 0.0%)

Asian

Day 57

Placebo

Positive

Live virus-nAb MN50

22

56.8/78.3 = 72.5%(39.6%, 91.4%)

56.8/78.3 = 72.5%(39.6%, 91.4%)

56.8/78.3 = 72.5%(39.6%, 91.4%)

Black or African American

Day 29

Vaccine

Negative

Live virus-nAb MN50

186

864.8/1902.4 = 45.5%(36.0%, 55.3%)

1146.4/1902.4 = 60.3%(50.0%, 69.7%)

860.9/1902.4 = 45.3%(35.8%, 55.1%)

Black or African American

Day 29

Vaccine

Positive

Live virus-nAb MN50

37

91.5/150.7 = 60.7%(40.2%, 78.0%)

118/150.7 = 78.3%(61.4%, 89.1%)

88.6/150.7 = 58.8%(38.9%, 76.2%)

Black or African American

Day 29

Placebo

Negative

Live virus-nAb MN50

30

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

Black or African American

Day 29

Placebo

Positive

Live virus-nAb MN50

54

65.9/189.9 = 34.7%(21.6%, 50.6%)

110.8/189.9 = 58.3%(40.8%, 74.0%)

65.9/189.9 = 34.7%(21.6%, 50.6%)

Black or African American

Day 57

Vaccine

Negative

Live virus-nAb MN50

186

1606.3/1902.4 = 84.4%(75.2%, 90.6%)

1720.1/1902.4 = 90.4%(81.5%, 95.3%)

1602.4/1902.4 = 84.2%(75.0%, 90.5%)

Black or African American

Day 57

Vaccine

Positive

Live virus-nAb MN50

37

147.8/150.7 = 98.1%(86.8%, 99.8%)

150.7/150.7 = 100.0%(100.0%, 100.0%)

147.8/150.7 = 98.1%(86.8%, 99.8%)

Black or African American

Day 57

Placebo

Negative

Live virus-nAb MN50

30

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

0/460.2 = 0.0%(0.0%, 0.0%)

Black or African American

Day 57

Placebo

Positive

Live virus-nAb MN50

54

142.7/189.9 = 75.2%(56.4%, 87.7%)

160.6/189.9 = 84.6%(65.9%, 94.0%)

142.7/189.9 = 75.2%(56.4%, 87.7%)

Multiracial

Day 29

Vaccine

Negative

Live virus-nAb MN50

50

230.9/504.6 = 45.8%(27.2%, 65.6%)

315.6/504.6 = 62.6%(41.5%, 79.7%)

230.9/504.6 = 45.8%(27.2%, 65.6%)

Multiracial

Day 29

Vaccine

Positive

Live virus-nAb MN50

16

56.8/77.7 = 73.2%(34.1%, 93.5%)

65.8/77.7 = 84.8%(42.2%, 97.7%)

56.8/77.7 = 73.2%(34.1%, 93.5%)

Multiracial

Day 29

Placebo

Negative

Live virus-nAb MN50

12

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

Multiracial

Day 29

Placebo

Positive

Live virus-nAb MN50

12

9.7/46.7 = 20.7%(9.1%, 40.5%)

17.4/46.7 = 37.3%(9.4%, 77.3%)

9.7/46.7 = 20.7%(9.1%, 40.5%)

Multiracial

Day 57

Vaccine

Negative

Live virus-nAb MN50

50

439.3/504.6 = 87.1%(64.0%, 96.2%)

473.4/504.6 = 93.8%(69.5%, 99.0%)

439.3/504.6 = 87.1%(64.0%, 96.2%)

Multiracial

Day 57

Vaccine

Positive

Live virus-nAb MN50

16

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

77.7/77.7 = 100.0%(100.0%, 100.0%)

Multiracial

Day 57

Placebo

Negative

Live virus-nAb MN50

12

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

0/268.9 = 0.0%(0.0%, 0.0%)

Multiracial

Day 57

Placebo

Positive

Live virus-nAb MN50

12

36.7/46.7 = 78.5%(26.3%, 97.4%)

36.7/46.7 = 78.5%(26.3%, 97.4%)

36.7/46.7 = 78.5%(26.3%, 97.4%)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Negative

Live virus-nAb MN50

17

125.7/197.8 = 63.5%(25.6%, 89.8%)

184.2/197.8 = 93.1%(76.8%, 98.2%)

125.7/197.8 = 63.5%(25.6%, 89.8%)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Positive

Live virus-nAb MN50

3

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Negative

Live virus-nAb MN50

3

0/22 = 0.0%

0/22 = 0.0%

0/22 = 0.0%

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Positive

Live virus-nAb MN50

4

9.6/13.7 = 70.1%

9.6/13.7 = 70.1%

9.6/13.7 = 70.1%

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Negative

Live virus-nAb MN50

17

193.9/197.8 = 98.0%(84.8%, 99.8%)

193.9/197.8 = 98.0%(84.8%, 99.8%)

193.9/197.8 = 98.0%(84.8%, 99.8%)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Positive

Live virus-nAb MN50

3

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

5.7/5.7 = 100.0%(100.0%, 100.0%)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Negative

Live virus-nAb MN50

3

0/22 = 0.0%

0/22 = 0.0%

0/22 = 0.0%

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Positive

Live virus-nAb MN50

4

11.5/13.7 = 83.6%

13.7/13.7 = 100.0%

11.5/13.7 = 83.6%

Other

Day 29

Vaccine

Negative

Live virus-nAb MN50

26

97.3/215.2 = 45.2%(20.6%, 72.4%)

128.5/215.2 = 59.7%(27.9%, 85.0%)

97.3/215.2 = 45.2%(20.6%, 72.4%)

Other

Day 29

Vaccine

Positive

Live virus-nAb MN50

12

53.1/62.1 = 85.5%(29.5%, 98.8%)

53.1/62.1 = 85.5%(29.5%, 98.8%)

53.1/62.1 = 85.5%(29.5%, 98.8%)

Other

Day 29

Placebo

Negative

Live virus-nAb MN50

2

0/12.9 = 0.0%

0/12.9 = 0.0%

0/12.9 = 0.0%

Other

Day 29

Placebo

Positive

Live virus-nAb MN50

12

3.7/53.1 = 7.0%(1.8%, 23.4%)

5.6/53.1 = 10.5%(4.8%, 21.3%)

3.7/53.1 = 7.0%(1.8%, 23.4%)

Other

Day 57

Vaccine

Negative

Live virus-nAb MN50

26

184/215.2 = 85.5%(41.0%, 98.0%)

211.3/215.2 = 98.2%(86.8%, 99.8%)

184/215.2 = 85.5%(41.0%, 98.0%)

Other

Day 57

Vaccine

Positive

Live virus-nAb MN50

12

53.1/62.1 = 85.5%(29.5%, 98.8%)

62.1/62.1 = 100.0%(100.0%, 100.0%)

53.1/62.1 = 85.5%(29.5%, 98.8%)

Other

Day 57

Placebo

Negative

Live virus-nAb MN50

2

0/12.9 = 0.0%

0/12.9 = 0.0%

0/12.9 = 0.0%

Other

Day 57

Placebo

Positive

Live virus-nAb MN50

12

35.3/53.1 = 66.4%(23.3%, 92.8%)

35.3/53.1 = 66.4%(23.3%, 92.8%)

33/53.1 = 62.2%(21.8%, 90.7%)

White

Day 29

Vaccine

Negative

Live virus-nAb MN50

59

351.2/753.7 = 46.6%(29.4%, 64.6%)

464.7/753.7 = 61.7%(41.8%, 78.3%)

351.2/753.7 = 46.6%(29.4%, 64.6%)

White

Day 29

Vaccine

Positive

Live virus-nAb MN50

32

123.5/168.9 = 73.1%(41.7%, 91.2%)

125.9/168.9 = 74.5%(42.5%, 92.1%)

123.5/168.9 = 73.1%(41.7%, 91.2%)

White

Day 29

Placebo

Negative

Live virus-nAb MN50

11

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

White

Day 29

Placebo

Positive

Live virus-nAb MN50

26

53.1/147.9 = 35.9%(15.9%, 62.3%)

80.4/147.9 = 54.3%(28.6%, 78.0%)

53.1/147.9 = 35.9%(15.9%, 62.3%)

White

Day 57

Vaccine

Negative

Live virus-nAb MN50

59

658.1/753.7 = 87.3%(66.2%, 96.0%)

689.3/753.7 = 91.5%(70.2%, 98.0%)

647.1/753.7 = 85.9%(65.4%, 95.1%)

White

Day 57

Vaccine

Positive

Live virus-nAb MN50

32

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

168.9/168.9 = 100.0%(100.0%, 100.0%)

White

Day 57

Placebo

Negative

Live virus-nAb MN50

11

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

0/172.6 = 0.0%(0.0%, 0.0%)

White

Day 57

Placebo

Positive

Live virus-nAb MN50

26

96.9/147.9 = 65.6%(37.1%, 86.0%)

129.4/147.9 = 87.5%(49.0%, 98.1%)

94.4/147.9 = 63.8%(35.7%, 84.9%)

White Non-Hispanic

Day 29

Vaccine

Negative

Live virus-nAb MN50

389

3582.3/6612 = 54.2%(47.5%, 60.7%)

4531.8/6612 = 68.5%(62.1%, 74.4%)

3506.9/6612 = 53.0%(46.4%, 59.6%)

White Non-Hispanic

Day 29

Vaccine

Positive

Live virus-nAb MN50

112

373.2/664 = 56.2%(43.1%, 68.5%)

486/664 = 73.2%(60.3%, 83.0%)

373.2/664 = 56.2%(43.1%, 68.5%)

White Non-Hispanic

Day 29

Placebo

Negative

Live virus-nAb MN50

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 29

Placebo

Positive

Live virus-nAb MN50

112

218.7/663 = 33.0%(22.5%, 45.5%)

319.5/663 = 48.2%(35.9%, 60.7%)

201/663 = 30.3%(20.4%, 42.5%)

White Non-Hispanic

Day 57

Vaccine

Negative

Live virus-nAb MN50

389

5800.8/6612 = 87.7%(82.5%, 91.5%)

6226.1/6612 = 94.2%(90.3%, 96.5%)

5793.7/6612 = 87.6%(82.4%, 91.4%)

White Non-Hispanic

Day 57

Vaccine

Positive

Live virus-nAb MN50

112

655.7/664 = 98.7%(96.0%, 99.6%)

658.1/664 = 99.1%(96.3%, 99.8%)

655.7/664 = 98.7%(96.0%, 99.6%)

White Non-Hispanic

Day 57

Placebo

Negative

Live virus-nAb MN50

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 57

Placebo

Positive

Live virus-nAb MN50

112

510.2/663 = 77.0%(64.2%, 86.1%)

575/663 = 86.7%(75.1%, 93.4%)

495.1/663 = 74.7%(61.7%, 84.4%)

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

Table 4i. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Race and ethnic group

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Race and ethnic group

White Non-Hispanic

Day 29

Vaccine

Negative

Live virus-nAb MN50

389

3582.3/6612 = 54.2%(47.5%, 60.7%)

4531.8/6612 = 68.5%(62.1%, 74.4%)

3506.9/6612 = 53.0%(46.4%, 59.6%)

White Non-Hispanic

Day 29

Vaccine

Positive

Live virus-nAb MN50

112

373.2/664 = 56.2%(43.1%, 68.5%)

486/664 = 73.2%(60.3%, 83.0%)

373.2/664 = 56.2%(43.1%, 68.5%)

White Non-Hispanic

Day 29

Placebo

Negative

Live virus-nAb MN50

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 29

Placebo

Positive

Live virus-nAb MN50

112

218.7/663 = 33.0%(22.5%, 45.5%)

319.5/663 = 48.2%(35.9%, 60.7%)

201/663 = 30.3%(20.4%, 42.5%)

White Non-Hispanic

Day 57

Vaccine

Negative

Live virus-nAb MN50

389

5800.8/6612 = 87.7%(82.5%, 91.5%)

6226.1/6612 = 94.2%(90.3%, 96.5%)

5793.7/6612 = 87.6%(82.4%, 91.4%)

White Non-Hispanic

Day 57

Vaccine

Positive

Live virus-nAb MN50

112

655.7/664 = 98.7%(96.0%, 99.6%)

658.1/664 = 99.1%(96.3%, 99.8%)

655.7/664 = 98.7%(96.0%, 99.6%)

White Non-Hispanic

Day 57

Placebo

Negative

Live virus-nAb MN50

66

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

0/1027 = 0.0%(0.0%, 0.0%)

White Non-Hispanic

Day 57

Placebo

Positive

Live virus-nAb MN50

112

510.2/663 = 77.0%(64.2%, 86.1%)

575/663 = 86.7%(75.1%, 93.4%)

495.1/663 = 74.7%(61.7%, 84.4%)

Communities of Color

Day 29

Vaccine

Negative

Live virus-nAb MN50

401

1824.9/3982 = 45.8%(39.3%, 52.5%)

2457.4/3982 = 61.7%(54.8%, 68.2%)

1821/3982 = 45.7%(39.2%, 52.4%)

Communities of Color

Day 29

Vaccine

Positive

Live virus-nAb MN50

110

320.3/488 = 65.6%(53.6%, 76.0%)

367.7/488 = 75.3%(63.5%, 84.3%)

317.5/488 = 65.1%(53.0%, 75.4%)

Communities of Color

Day 29

Placebo

Negative

Live virus-nAb MN50

65

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

Communities of Color

Day 29

Placebo

Positive

Live virus-nAb MN50

125

156.7/459 = 34.1%(24.9%, 44.7%)

251/459 = 54.7%(43.7%, 65.2%)

156.7/459 = 34.1%(24.9%, 44.7%)

Communities of Color

Day 57

Vaccine

Negative

Live virus-nAb MN50

401

3491/3982 = 87.7%(82.1%, 91.7%)

3743.2/3982 = 94.0%(89.3%, 96.7%)

3487.1/3982 = 87.6%(82.0%, 91.6%)

Communities of Color

Day 57

Vaccine

Positive

Live virus-nAb MN50

110

458.2/488 = 93.9%(83.8%, 97.9%)

479/488 = 98.2%(87.6%, 99.8%)

456.3/488 = 93.5%(83.6%, 97.6%)

Communities of Color

Day 57

Placebo

Negative

Live virus-nAb MN50

65

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

0/1009.6 = 0.0%(0.0%, 0.0%)

Communities of Color

Day 57

Placebo

Positive

Live virus-nAb MN50

125

348/459 = 75.8%(64.7%, 84.3%)

380.3/459 = 82.9%(72.2%, 90.0%)

345.7/459 = 75.3%(64.2%, 83.8%)

Day 29

Vaccine

Negative

Live virus-nAb MN50

114

958.4/1816.2 = 52.8%(40.3%, 64.9%)

1147.7/1816.2 = 63.2%(50.3%, 74.4%)

940.3/1816.2 = 51.8%(39.3%, 64.0%)

Day 29

Vaccine

Positive

Live virus-nAb MN50

51

177.8/264.7 = 67.2%(45.4%, 83.4%)

199.5/264.7 = 75.4%(52.7%, 89.4%)

177.8/264.7 = 67.2%(45.4%, 83.4%)

Day 29

Placebo

Negative

Live virus-nAb MN50

24

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

Day 29

Placebo

Positive

Live virus-nAb MN50

33

62.4/215.3 = 29.0%(13.3%, 52.1%)

101.1/215.3 = 46.9%(25.1%, 70.1%)

59.8/215.3 = 27.8%(12.4%, 51.3%)

Day 57

Vaccine

Negative

Live virus-nAb MN50

114

1680.3/1816.2 = 92.5%(82.2%, 97.1%)

1733.7/1816.2 = 95.5%(86.6%, 98.6%)

1662.2/1816.2 = 91.5%(81.5%, 96.4%)

Day 57

Vaccine

Positive

Live virus-nAb MN50

51

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

264.7/264.7 = 100.0%(100.0%, 100.0%)

Day 57

Placebo

Negative

Live virus-nAb MN50

24

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

0/337.1 = 0.0%(0.0%, 0.0%)

Day 57

Placebo

Positive

Live virus-nAb MN50

33

148.2/215.3 = 68.8%(42.2%, 87.0%)

196.8/215.3 = 91.4%(62.1%, 98.6%)

145.6/215.3 = 67.6%(41.2%, 86.2%)

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

Table 4j. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Age, Race and ethnic group

Group

Visit

Arm

Baseline COVID

Marker

N

Responder

% 2-Fold Rise

% 4-Fold Rise

Age, Race and ethnic group

Age < 65 Communities of Color

Day 29

Vaccine

Negative

Live virus-nAb MN50

184

1241.1/3137.5 = 39.6%(31.6%, 48.1%)

1753/3137.5 = 55.9%(47.3%, 64.1%)

1241.1/3137.5 = 39.6%(31.6%, 48.1%)

Age < 65 Communities of Color

Day 29

Vaccine

Positive

Live virus-nAb MN50

61

240.6/395 = 60.9%(46.4%, 73.7%)

282.3/395 = 71.5%(57.1%, 82.5%)

237.8/395 = 60.2%(45.7%, 73.1%)

Age < 65 Communities of Color

Day 29

Placebo

Negative

Live virus-nAb MN50

30

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

Age < 65 Communities of Color

Day 29

Placebo

Positive

Live virus-nAb MN50

71

104.9/359 = 29.2%(18.5%, 42.8%)

180.6/359 = 50.3%(36.9%, 63.6%)

104.9/359 = 29.2%(18.5%, 42.8%)

Age < 65 Communities of Color

Day 57

Vaccine

Negative

Live virus-nAb MN50

184

2700.9/3137.5 = 86.1%(79.0%, 91.0%)

2925.9/3137.5 = 93.3%(87.2%, 96.6%)

2700.9/3137.5 = 86.1%(79.0%, 91.0%)

Age < 65 Communities of Color

Day 57

Vaccine

Positive

Live virus-nAb MN50

61

365.2/395 = 92.4%(80.0%, 97.4%)

386/395 = 97.7%(84.7%, 99.7%)

365.2/395 = 92.4%(80.0%, 97.4%)

Age < 65 Communities of Color

Day 57

Placebo

Negative

Live virus-nAb MN50

30

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

0/783.1 = 0.0%(0.0%, 0.0%)

Age < 65 Communities of Color

Day 57

Placebo

Positive

Live virus-nAb MN50

71

255.4/359 = 71.1%(57.3%, 81.9%)

287.7/359 = 80.2%(66.6%, 89.1%)

253.1/359 = 70.5%(56.7%, 81.4%)

Age < 65 NA

Day 29

Vaccine

Negative

Live virus-nAb MN50

57

695.4/1410.9 = 49.3%(33.9%, 64.8%)

877.5/1410.9 = 62.2%(45.9%, 76.1%)

684.3/1410.9 = 48.5%(33.2%, 64.1%)

Age < 65 NA

Day 29

Vaccine

Positive

Live virus-nAb MN50

28

131.7/208.9 = 63.0%(36.5%, 83.5%)

151/208.9 = 72.3%(44.1%, 89.6%)

131.7/208.9 = 63.0%(36.5%, 83.5%)

Age < 65 NA

Day 29

Placebo

Negative

Live virus-nAb MN50

13

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

Age < 65 NA

Day 29

Placebo

Positive

Live virus-nAb MN50

17

36.9/174.4 = 21.1%(5.6%, 54.8%)

70.4/174.4 = 40.4%(15.9%, 70.8%)

36.9/174.4 = 21.1%(5.6%, 54.8%)

Age < 65 NA

Day 57

Vaccine

Negative

Live virus-nAb MN50

57

1282.2/1410.9 = 90.9%(77.4%, 96.7%)

1335.5/1410.9 = 94.7%(82.9%, 98.5%)

1271.1/1410.9 = 90.1%(77.0%, 96.1%)

Age < 65 NA

Day 57

Vaccine

Positive

Live virus-nAb MN50

28

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

208.9/208.9 = 100.0%(100.0%, 100.0%)

Age < 65 NA

Day 57

Placebo

Negative

Live virus-nAb MN50

13

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

0/254.9 = 0.0%(0.0%, 0.0%)

Age < 65 NA

Day 57

Placebo

Positive

Live virus-nAb MN50

17

107.3/174.4 = 61.5%(30.5%, 85.4%)

156/174.4 = 89.4%(53.4%, 98.4%)

107.3/174.4 = 61.5%(30.5%, 85.4%)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Negative

Live virus-nAb MN50

191

2650.8/5204.1 = 50.9%(42.7%, 59.1%)

3451/5204.1 = 66.3%(58.2%, 73.5%)

2575.4/5204.1 = 49.5%(41.3%, 57.7%)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Positive

Live virus-nAb MN50

56

273.8/528.2 = 51.8%(35.9%, 67.4%)

372/528.2 = 70.4%(54.4%, 82.6%)

273.8/528.2 = 51.8%(35.9%, 67.4%)

Age < 65 White Non-Hispanic

Day 29

Placebo

Negative

Live virus-nAb MN50

36

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

Age < 65 White Non-Hispanic

Day 29

Placebo

Positive

Live virus-nAb MN50

61

157.5/532.9 = 29.5%(17.5%, 45.4%)

237.9/532.9 = 44.6%(30.0%, 60.2%)

142.3/532.9 = 26.7%(15.3%, 42.3%)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Negative

Live virus-nAb MN50

191

4499.6/5204.1 = 86.5%(79.8%, 91.2%)

4882.2/5204.1 = 93.8%(88.9%, 96.6%)

4499.6/5204.1 = 86.5%(79.8%, 91.2%)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Positive

Live virus-nAb MN50

56

524.7/528.2 = 99.3%(95.2%, 99.9%)

524.7/528.2 = 99.3%(95.2%, 99.9%)

524.7/528.2 = 99.3%(95.2%, 99.9%)

Age < 65 White Non-Hispanic

Day 57

Placebo

Negative

Live virus-nAb MN50

36

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

0/802.9 = 0.0%(0.0%, 0.0%)

Age < 65 White Non-Hispanic

Day 57

Placebo

Positive

Live virus-nAb MN50

61

400.5/532.9 = 75.2%(59.3%, 86.2%)

452.5/532.9 = 84.9%(70.3%, 93.0%)

385.4/532.9 = 72.3%(56.3%, 84.1%)

Age >= 65 Communities of Color

Day 29

Vaccine

Negative

Live virus-nAb MN50

217

583.8/844.5 = 69.1%(62.6%, 75.0%)

704.4/844.5 = 83.4%(77.8%, 87.8%)

579.9/844.5 = 68.7%(62.1%, 74.5%)

Age >= 65 Communities of Color

Day 29

Vaccine

Positive

Live virus-nAb MN50

49

79.7/93 = 85.7%(72.4%, 93.2%)

85.4/93 = 91.8%(79.6%, 97.0%)

79.7/93 = 85.7%(72.4%, 93.2%)

Age >= 65 Communities of Color

Day 29

Placebo

Negative

Live virus-nAb MN50

35

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

Age >= 65 Communities of Color

Day 29

Placebo

Positive

Live virus-nAb MN50

54

51.9/100 = 51.9%(38.3%, 65.1%)

70.4/100 = 70.4%(56.5%, 81.3%)

51.9/100 = 51.9%(38.3%, 65.1%)

Age >= 65 Communities of Color

Day 57

Vaccine

Negative

Live virus-nAb MN50

217

790/844.5 = 93.5%(89.4%, 96.2%)

817.3/844.5 = 96.8%(93.4%, 98.5%)

786.1/844.5 = 93.1%(88.8%, 95.8%)

Age >= 65 Communities of Color

Day 57

Vaccine

Positive

Live virus-nAb MN50

49

93/93 = 100.0%(100.0%, 100.0%)

93/93 = 100.0%(100.0%, 100.0%)

91.1/93 = 98.0%(86.0%, 99.7%)

Age >= 65 Communities of Color

Day 57

Placebo

Negative

Live virus-nAb MN50

35

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

0/226.5 = 0.0%(0.0%, 0.0%)

Age >= 65 Communities of Color

Day 57

Placebo

Positive

Live virus-nAb MN50

54

92.6/100 = 92.6%(81.4%, 97.3%)

92.6/100 = 92.6%(81.4%, 97.3%)

92.6/100 = 92.6%(81.4%, 97.3%)

Age >= 65 NA

Day 29

Vaccine

Negative

Live virus-nAb MN50

57

263.1/405.3 = 64.9%(51.4%, 76.4%)

270.2/405.3 = 66.7%(53.1%, 77.9%)

256/405.3 = 63.2%(49.6%, 74.9%)

Age >= 65 NA

Day 29

Vaccine

Positive

Live virus-nAb MN50

23

46.1/55.8 = 82.6%(59.7%, 93.8%)

48.5/55.8 = 87.0%(64.2%, 96.1%)

46.1/55.8 = 82.6%(59.7%, 93.8%)

Age >= 65 NA

Day 29

Placebo

Negative

Live virus-nAb MN50

11

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

Age >= 65 NA

Day 29

Placebo

Positive

Live virus-nAb MN50

16

25.5/40.8 = 62.5%(34.8%, 83.9%)

30.6/40.8 = 75.0%(45.7%, 91.4%)

23/40.8 = 56.2%(29.8%, 79.6%)

Age >= 65 NA

Day 57

Vaccine

Negative

Live virus-nAb MN50

57

398.2/405.3 = 98.2%(87.9%, 99.8%)

398.2/405.3 = 98.2%(87.9%, 99.8%)

391.1/405.3 = 96.5%(86.5%, 99.2%)

Age >= 65 NA

Day 57

Vaccine

Positive

Live virus-nAb MN50

23

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

55.8/55.8 = 100.0%(100.0%, 100.0%)

Age >= 65 NA

Day 57

Placebo

Negative

Live virus-nAb MN50

11

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

0/82.2 = 0.0%(0.0%, 0.0%)

Age >= 65 NA

Day 57

Placebo

Positive

Live virus-nAb MN50

16

40.8/40.8 = 100.0%(100.0%, 100.0%)

40.8/40.8 = 100.0%(100.0%, 100.0%)

38.3/40.8 = 93.7%(60.7%, 99.3%)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Negative

Live virus-nAb MN50

198

931.4/1407.8 = 66.2%(59.2%, 72.5%)

1080.8/1407.8 = 76.8%(70.3%, 82.2%)

931.4/1407.8 = 66.2%(59.2%, 72.5%)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Positive

Live virus-nAb MN50

56

99.4/135.8 = 73.2%(59.8%, 83.4%)

114/135.8 = 83.9%(71.4%, 91.6%)

99.4/135.8 = 73.2%(59.8%, 83.4%)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Negative

Live virus-nAb MN50

30

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Positive

Live virus-nAb MN50

51

61.3/130.2 = 47.1%(33.5%, 61.1%)

81.7/130.2 = 62.7%(48.3%, 75.2%)

58.7/130.2 = 45.1%(31.7%, 59.2%)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Negative

Live virus-nAb MN50

198

1301.2/1407.8 = 92.4%(87.8%, 95.4%)

1343.8/1407.8 = 95.5%(91.5%, 97.6%)

1294.1/1407.8 = 91.9%(87.2%, 95.0%)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Positive

Live virus-nAb MN50

56

130.9/135.8 = 96.4%(86.3%, 99.1%)

133.4/135.8 = 98.2%(87.7%, 99.8%)

130.9/135.8 = 96.4%(86.3%, 99.1%)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Negative

Live virus-nAb MN50

30

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

0/224.1 = 0.0%(0.0%, 0.0%)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Positive

Live virus-nAb MN50

51

109.7/130.2 = 84.3%(71.1%, 92.1%)

122.5/130.2 = 94.1%(82.7%, 98.2%)

109.7/130.2 = 84.3%(71.1%, 92.1%)

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

Table 5a. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by All participants

Group

Visit

Arm

Baseline COVID

Marker

N

GMT/GMC

All participants

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

904

10(10, 10)

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

904

10(10, 10)

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

904

10(10, 10)

Day 1

Vaccine

Negative

Live virus-nAb MN50

904

31(31, 31)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

904

5(5, 5)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

904

5(5, 5)

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

273

10(10, 10)

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

273

10(10, 10)

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

273

10(10, 10)

Day 1

Vaccine

Positive

Live virus-nAb MN50

273

31(31, 31)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

273

5(5, 5)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

273

5(5, 5)

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

155

10(10, 10)

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

155

10(10, 10)

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

155

10(10, 10)

Day 1

Placebo

Negative

Live virus-nAb MN50

155

31(31, 31)

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

155

5(5, 5)

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

155

5(5, 5)

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

270

10(10, 10)

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

270

10(10, 10)

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

270

10(10, 10)

Day 1

Placebo

Positive

Live virus-nAb MN50

270

31(31, 31)

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

270

5(5, 5)

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

270

5(5, 5)

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

904

24220(20801, 28202)

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

904

24778(21610, 28411)

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

904

46301(41313, 51891)

Day 29

Vaccine

Negative

Live virus-nAb MN50

904

150(132, 170)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

904

106(91, 123)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

904

217(186, 253)

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

273

38929(28974, 52304)

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

273

40407(31177, 52370)

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

273

80434(65269, 99124)

Day 29

Vaccine

Positive

Live virus-nAb MN50

273

210(164, 269)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

273

173(132, 227)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

273

337(255, 445)

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

155

10(10, 10)

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

155

10(10, 10)

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

155

10(10, 10)

Day 29

Placebo

Negative

Live virus-nAb MN50

155

31(31, 31)

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

155

5(5, 5)

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

155

5(5, 5)

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

270

12225(9438, 15835)

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

270

11927(9430, 15085)

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

270

18081(15037, 21741)

Day 29

Placebo

Positive

Live virus-nAb MN50

270

88(71, 108)

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

270

51(40, 65)

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

270

150(114, 198)

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

904

402190(335224, 482533)

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

904

1074131(934344, 1234832)

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

904

2349481(2085980, 2646267)

Day 57

Vaccine

Negative

Live virus-nAb MN50

904

1465(1241, 1728)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

904

1784(1481, 2148)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

904

2900(2421, 3473)

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

273

860317(615674, 1202171)

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

273

2681811(2105403, 3416023)

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

273

5800314(4839344, 6952107)

Day 57

Vaccine

Positive

Live virus-nAb MN50

273

3827(3024, 4843)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

273

4749(3360, 6714)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

273

7806(5412, 11259)

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

155

10(10, 10)

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

155

10(10, 10)

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

155

10(10, 10)

Day 57

Placebo

Negative

Live virus-nAb MN50

155

31(31, 31)

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

155

5(5, 5)

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

155

5(5, 5)

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

270

150527(109098, 207686)

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

270

462227(354280, 603065)

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

270

723728(582826, 898695)

Day 57

Placebo

Positive

Live virus-nAb MN50

270

595(443, 799)

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

270

521(364, 746)

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

270

1714(1251, 2350)

Table 5b. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age Group

Visit

Arm

Baseline COVID

Marker

N

GMT/GMC

Age

Age < 65

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

432

10(10, 10)

Age < 65

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

432

10(10, 10)

Age < 65

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

432

10(10, 10)

Age < 65

Day 1

Vaccine

Negative

Live virus-nAb MN50

432

31(31, 31)

Age < 65

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

432

5(5, 5)

Age < 65

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

432

5(5, 5)

Age < 65

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

145

10(10, 10)

Age < 65

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

145

10(10, 10)

Age < 65

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

145

10(10, 10)

Age < 65

Day 1

Vaccine

Positive

Live virus-nAb MN50

145

31(31, 31)

Age < 65

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

145

5(5, 5)

Age < 65

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

145

5(5, 5)

Age < 65

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

79

10(10, 10)

Age < 65

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

79

10(10, 10)

Age < 65

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

79

10(10, 10)

Age < 65

Day 1

Placebo

Negative

Live virus-nAb MN50

79

31(31, 31)

Age < 65

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

79

5(5, 5)

Age < 65

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

79

5(5, 5)

Age < 65

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

149

10(10, 10)

Age < 65

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

149

10(10, 10)

Age < 65

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

149

10(10, 10)

Age < 65

Day 1

Placebo

Positive

Live virus-nAb MN50

149

31(31, 31)

Age < 65

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

149

5(5, 5)

Age < 65

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

149

5(5, 5)

Age < 65

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

432

18658(15448, 22535)

Age < 65

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

432

18570(15669, 22007)

Age < 65

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

432

35143(30513, 40475)

Age < 65

Day 29

Vaccine

Negative

Live virus-nAb MN50

432

129(111, 152)

Age < 65

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

432

82(68, 98)

Age < 65

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

432

178(147, 216)

Age < 65

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

145

30497(21247, 43773)

Age < 65

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

145

31564(22945, 43423)

Age < 65

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

145

61982(47941, 80136)

Age < 65

Day 29

Vaccine

Positive

Live virus-nAb MN50

145

174(129, 236)

Age < 65

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

145

137(98, 190)

Age < 65

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

145

273(194, 383)

Age < 65

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

79

10(10, 10)

Age < 65

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

79

10(10, 10)

Age < 65

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

79

10(10, 10)

Age < 65

Day 29

Placebo

Negative

Live virus-nAb MN50

79

31(31, 31)

Age < 65

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

79

5(5, 5)

Age < 65

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

79

5(5, 5)

Age < 65

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

149

9585(7004, 13117)

Age < 65

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

149

8824(6622, 11759)

Age < 65

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

149

13814(11019, 17316)

Age < 65

Day 29

Placebo

Positive

Live virus-nAb MN50

149

76(59, 98)

Age < 65

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

149

40(29, 54)

Age < 65

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

149

129(92, 180)

Age < 65

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

432

307742(245520, 385733)

Age < 65

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

432

808208(680044, 960528)

Age < 65

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

432

1822080(1572698, 2111007)

Age < 65

Day 57

Vaccine

Negative

Live virus-nAb MN50

432

1209(984, 1484)

Age < 65

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

432

1347(1070, 1694)

Age < 65

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

432

2347(1879, 2933)

Age < 65

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

145

636064(421509, 959832)

Age < 65

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

145

2129806(1580185, 2870596)

Age < 65

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

145

4719631(3771941, 5905425)

Age < 65

Day 57

Vaccine

Positive

Live virus-nAb MN50

145

3328(2496, 4437)

Age < 65

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

145

3392(2228, 5165)

Age < 65

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

145

6035(3851, 9458)

Age < 65

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

79

10(10, 10)

Age < 65

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

79

10(10, 10)

Age < 65

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

79

10(10, 10)

Age < 65

Day 57

Placebo

Negative

Live virus-nAb MN50

79

31(31, 31)

Age < 65

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

79

5(5, 5)

Age < 65

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

79

5(5, 5)

Age < 65

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

149

109167(73580, 161968)

Age < 65

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

149

335691(242201, 465269)

Age < 65

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

149

520333(398930, 678681)

Age < 65

Day 57

Placebo

Positive

Live virus-nAb MN50

149

456(318, 653)

Age < 65

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

149

358(231, 555)

Age < 65

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

149

1432(977, 2099)

Age >= 65

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

472

10(10, 10)

Age >= 65

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

472

10(10, 10)

Age >= 65

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

472

10(10, 10)

Age >= 65

Day 1

Vaccine

Negative

Live virus-nAb MN50

472

31(31, 31)

Age >= 65

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

472

5(5, 5)

Age >= 65

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

472

5(5, 5)

Age >= 65

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

128

10(10, 10)

Age >= 65

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

128

10(10, 10)

Age >= 65

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

128

10(10, 10)

Age >= 65

Day 1

Vaccine

Positive

Live virus-nAb MN50

128

31(31, 31)

Age >= 65

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

128

5(5, 5)

Age >= 65

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

128

5(5, 5)

Age >= 65

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

76

10(10, 10)

Age >= 65

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

76

10(10, 10)

Age >= 65

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

76

10(10, 10)

Age >= 65

Day 1

Placebo

Negative

Live virus-nAb MN50

76

31(31, 31)

Age >= 65

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

76

5(5, 5)

Age >= 65

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

76

5(5, 5)

Age >= 65

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

121

10(10, 10)

Age >= 65

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

121

10(10, 10)

Age >= 65

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

121

10(10, 10)

Age >= 65

Day 1

Placebo

Positive

Live virus-nAb MN50

121

31(31, 31)

Age >= 65

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

121

5(5, 5)

Age >= 65

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

121

5(5, 5)

Age >= 65

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

472

63096(53856, 73923)

Age >= 65

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

472

71407(62056, 82168)

Age >= 65

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

472

127358(112877, 143697)

Age >= 65

Day 29

Vaccine

Negative

Live virus-nAb MN50

472

256(220, 298)

Age >= 65

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

472

277(235, 326)

Age >= 65

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

472

447(378, 528)

Age >= 65

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

128

102819(75618, 139805)

Age >= 65

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

128

107940(85062, 136972)

Age >= 65

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

128

226833(186901, 275296)

Age >= 65

Day 29

Vaccine

Positive

Live virus-nAb MN50

128

440(335, 578)

Age >= 65

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

128

438(326, 589)

Age >= 65

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

128

783(585, 1047)

Age >= 65

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

76

10(10, 10)

Age >= 65

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

76

10(10, 10)

Age >= 65

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

76

10(10, 10)

Age >= 65

Day 29

Placebo

Negative

Live virus-nAb MN50

76

31(31, 31)

Age >= 65

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

76

5(5, 5)

Age >= 65

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

76

5(5, 5)

Age >= 65

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

121

31839(22967, 44138)

Age >= 65

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

121

39035(30117, 50594)

Age >= 65

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

121

52144(43046, 63165)

Age >= 65

Day 29

Placebo

Positive

Live virus-nAb MN50

121

156(119, 205)

Age >= 65

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

121

134(98, 182)

Age >= 65

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

121

275(198, 381)

Age >= 65

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

472

1074000(887932, 1299059)

Age >= 65

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

472

3050568(2626433, 3543196)

Age >= 65

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

472

5971935(5245378, 6799131)

Age >= 65

Day 57

Vaccine

Negative

Live virus-nAb MN50

472

2964(2499, 3517)

Age >= 65

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

472

5003(4056, 6170)

Age >= 65

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

472

6297(5132, 7727)

Age >= 65

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

128

2860668(2102225, 3892742)

Age >= 65

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

128

6708518(5477341, 8216434)

Age >= 65

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

128

13173416(11520206, 15063871)

Age >= 65

Day 57

Vaccine

Positive

Live virus-nAb MN50

128

6671(5177, 8596)

Age >= 65

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

128

18112(11950, 27452)

Age >= 65

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

128

21727(15143, 31174)

Age >= 65

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

76

10(10, 10)

Age >= 65

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

76

10(10, 10)

Age >= 65

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

76

10(10, 10)

Age >= 65

Day 57

Placebo

Negative

Live virus-nAb MN50

76

31(31, 31)

Age >= 65

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

76

5(5, 5)

Age >= 65

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

76

5(5, 5)

Age >= 65

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

121

532830(380457, 746228)

Age >= 65

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

121

1627241(1242074, 2131847)

Age >= 65

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

121

2650955(2125167, 3306827)

Age >= 65

Day 57

Placebo

Positive

Live virus-nAb MN50

121

1693(1208, 2373)

Age >= 65

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

121

2270(1516, 3398)

Age >= 65

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

121

3482(2359, 5139)

Table 5c. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Risk for Severe Covid-19

Group

Visit

Arm

Baseline COVID

Marker

N

GMT/GMC

Risk for Severe Covid-19

At-risk

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

460

10(10, 10)

At-risk

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

460

10(10, 10)

At-risk

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

460

10(10, 10)

At-risk

Day 1

Vaccine

Negative

Live virus-nAb MN50

460

31(31, 31)

At-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

460

5(5, 5)

At-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

460

5(5, 5)

At-risk

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

126

10(10, 10)

At-risk

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

126

10(10, 10)

At-risk

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

126

10(10, 10)

At-risk

Day 1

Vaccine

Positive

Live virus-nAb MN50

126

31(31, 31)

At-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

126

5(5, 5)

At-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

126

5(5, 5)

At-risk

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

78

10(10, 10)

At-risk

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

78

10(10, 10)

At-risk

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

78

10(10, 10)

At-risk

Day 1

Placebo

Negative

Live virus-nAb MN50

78

31(31, 31)

At-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

78

5(5, 5)

At-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

78

5(5, 5)

At-risk

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

120

10(10, 10)

At-risk

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

120

10(10, 10)

At-risk

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

120

10(10, 10)

At-risk

Day 1

Placebo

Positive

Live virus-nAb MN50

120

31(31, 31)

At-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

120

5(5, 5)

At-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

120

5(5, 5)

At-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

460

24877(21066, 29377)

At-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

460

25704(21957, 30089)

At-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

460

48231(42255, 55054)

At-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

460

148(129, 170)

At-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

460

107(90, 127)

At-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

460

198(166, 236)

At-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

126

42911(30641, 60095)

At-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

126

41011(31745, 52980)

At-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

126

92863(74600, 115598)

At-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

126

233(179, 303)

At-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

126

197(142, 273)

At-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

126

345(247, 481)

At-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

78

10(10, 10)

At-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

78

10(10, 10)

At-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

78

10(10, 10)

At-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

78

31(31, 31)

At-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

78

5(5, 5)

At-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

78

5(5, 5)

At-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

120

14147(10032, 19949)

At-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

120

14796(10943, 20005)

At-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

120

22387(18015, 27820)

At-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

120

102(78, 133)

At-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

120

65(48, 88)

At-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

120

161(114, 227)

At-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

460

380309(309658, 467078)

At-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

460

1138126(955524, 1355623)

At-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

460

2291768(1963317, 2675167)

At-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

460

1666(1386, 2002)

At-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

460

1699(1361, 2122)

At-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

460

2822(2287, 3482)

At-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

126

996972(698286, 1423418)

At-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

126

2930696(2188863, 3923945)

At-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

126

5733510(4581393, 7175359)

At-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

126

3514(2650, 4659)

At-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

126

4717(3090, 7201)

At-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

126

8763(5969, 12866)

At-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

78

10(10, 10)

At-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

78

10(10, 10)

At-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

78

10(10, 10)

At-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

78

31(31, 31)

At-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

78

5(5, 5)

At-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

78

5(5, 5)

At-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

120

198664(137806, 286399)

At-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

120

599785(434982, 827028)

At-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

120

980255(758629, 1266628)

At-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

120

770(536, 1107)

At-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

120

811(547, 1203)

At-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

120

1695(1156, 2485)

Not at-risk

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

444

10(10, 10)

Not at-risk

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

444

10(10, 10)

Not at-risk

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

444

10(10, 10)

Not at-risk

Day 1

Vaccine

Negative

Live virus-nAb MN50

444

31(31, 31)

Not at-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

444

5(5, 5)

Not at-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

444

5(5, 5)

Not at-risk

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

147

10(10, 10)

Not at-risk

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

147

10(10, 10)

Not at-risk

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

147

10(10, 10)

Not at-risk

Day 1

Vaccine

Positive

Live virus-nAb MN50

147

31(31, 31)

Not at-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

147

5(5, 5)

Not at-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

147

5(5, 5)

Not at-risk

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

77

10(10, 10)

Not at-risk

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

77

10(10, 10)

Not at-risk

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

77

10(10, 10)

Not at-risk

Day 1

Placebo

Negative

Live virus-nAb MN50

77

31(31, 31)

Not at-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

77

5(5, 5)

Not at-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

77

5(5, 5)

Not at-risk

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

150

10(10, 10)

Not at-risk

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

150

10(10, 10)

Not at-risk

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

150

10(10, 10)

Not at-risk

Day 1

Placebo

Positive

Live virus-nAb MN50

150

31(31, 31)

Not at-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

150

5(5, 5)

Not at-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

150

5(5, 5)

Not at-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

444

23982(19654, 29263)

Not at-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

444

24445(20461, 29205)

Not at-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

444

45607(39327, 52889)

Not at-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

444

150(127, 178)

Not at-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

444

106(87, 129)

Not at-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

444

224(183, 274)

Not at-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

147

37661(25792, 54990)

Not at-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

147

40204(28724, 56272)

Not at-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

147

76599(58477, 100336)

Not at-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

147

203(147, 279)

Not at-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

147

165(117, 233)

Not at-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

147

335(235, 477)

Not at-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

77

10(10, 10)

Not at-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

77

10(10, 10)

Not at-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

77

10(10, 10)

Not at-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

77

31(31, 31)

Not at-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

77

5(5, 5)

Not at-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

77

5(5, 6)

Not at-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

150

11688(8474, 16119)

Not at-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

150

11162(8329, 14958)

Not at-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

150

16930(13432, 21339)

Not at-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

150

84(65, 109)

Not at-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

150

47(35, 64)

Not at-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

150

147(104, 208)

Not at-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

444

410590(323795, 520651)

Not at-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

444

1051406(878650, 1258128)

Not at-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

444

2371172(2036164, 2761300)

Not at-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

444

1397(1125, 1733)

Not at-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

444

1816(1427, 2310)

Not at-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

444

2929(2317, 3703)

Not at-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

147

818251(531355, 1260049)

Not at-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

147

2602083(1910844, 3543374)

Not at-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

147

5823208(4625122, 7331644)

Not at-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

147

3939(2917, 5320)

Not at-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

147

4760(3065, 7393)

Not at-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

147

7505(4676, 12045)

Not at-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

77

10(10, 10)

Not at-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

77

10(10, 10)

Not at-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

77

10(10, 10)

Not at-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

77

31(31, 31)

Not at-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

77

5(5, 5)

Not at-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

77

5(5, 5)

Not at-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

150

138210(92120, 207361)

Not at-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

150

426627(305619, 595547)

Not at-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

150

659233(502270, 865248)

Not at-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

150

549(380, 794)

Not at-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

150

455(289, 715)

Not at-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

150

1720(1159, 2554)

Table 5d. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Risk for Severe Covid-19

Group

Visit

Arm

Baseline COVID

Marker

N

GMT/GMC

Age, Risk for Severe Covid-19

Age < 65 At-risk

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

216

10(10, 10)

Age < 65 At-risk

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

10(10, 10)

Age < 65 At-risk

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

10(10, 10)

Age < 65 At-risk

Day 1

Vaccine

Negative

Live virus-nAb MN50

216

31(31, 31)

Age < 65 At-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

216

5(5, 5)

Age < 65 At-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

216

5(5, 5)

Age < 65 At-risk

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

73

10(10, 10)

Age < 65 At-risk

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

73

10(10, 10)

Age < 65 At-risk

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

73

10(10, 10)

Age < 65 At-risk

Day 1

Vaccine

Positive

Live virus-nAb MN50

73

31(31, 31)

Age < 65 At-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

73

5(5, 5)

Age < 65 At-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

73

5(5, 5)

Age < 65 At-risk

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

39

10(10, 10)

Age < 65 At-risk

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

39

10(10, 10)

Age < 65 At-risk

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

39

10(10, 10)

Age < 65 At-risk

Day 1

Placebo

Negative

Live virus-nAb MN50

39

31(31, 31)

Age < 65 At-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

39

5(5, 6)

Age < 65 At-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

39

5(5, 5)

Age < 65 At-risk

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

75

10(10, 10)

Age < 65 At-risk

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

75

10(10, 10)

Age < 65 At-risk

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

75

10(10, 10)

Age < 65 At-risk

Day 1

Placebo

Positive

Live virus-nAb MN50

75

31(31, 31)

Age < 65 At-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

75

5(5, 5)

Age < 65 At-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

75

5(5, 5)

Age < 65 At-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

216

15573(12291, 19732)

Age < 65 At-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

15353(12212, 19303)

Age < 65 At-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

28809(23868, 34773)

Age < 65 At-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

216

111(92, 134)

Age < 65 At-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

216

66(52, 85)

Age < 65 At-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

216

131(103, 168)

Age < 65 At-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

73

31496(19820, 50049)

Age < 65 At-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

73

26426(18770, 37205)

Age < 65 At-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

73

61629(46183, 82240)

Age < 65 At-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

73

176(125, 247)

Age < 65 At-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

73

154(99, 241)

Age < 65 At-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

73

244(153, 388)

Age < 65 At-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

39

10(10, 10)

Age < 65 At-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

39

10(10, 10)

Age < 65 At-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

39

10(10, 10)

Age < 65 At-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

39

31(31, 31)

Age < 65 At-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

39

5(5, 5)

Age < 65 At-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

39

5(5, 5)

Age < 65 At-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

75

10580(6916, 16185)

Age < 65 At-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

75

10488(7074, 15550)

Age < 65 At-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

75

16856(12606, 22539)

Age < 65 At-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

75

90(65, 123)

Age < 65 At-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

75

50(35, 72)

Age < 65 At-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

75

132(88, 198)

Age < 65 At-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

216

223078(166792, 298359)

Age < 65 At-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

706517(549446, 908489)

Age < 65 At-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

1471756(1181271, 1833674)

Age < 65 At-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

216

1195(918, 1556)

Age < 65 At-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

216

1048(765, 1436)

Age < 65 At-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

216

1728(1292, 2312)

Age < 65 At-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

73

633405(390586, 1027180)

Age < 65 At-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

73

1991662(1337027, 2966819)

Age < 65 At-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

73

4099034(3012770, 5576953)

Age < 65 At-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

73

2877(1988, 4162)

Age < 65 At-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

73

2857(1666, 4900)

Age < 65 At-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

73

5836(3497, 9740)

Age < 65 At-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

39

10(10, 10)

Age < 65 At-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

39

10(10, 10)

Age < 65 At-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

39

10(10, 10)

Age < 65 At-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

39

31(31, 31)

Age < 65 At-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

39

5(5, 5)

Age < 65 At-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

39

5(5, 5)

Age < 65 At-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

75

133749(83326, 214685)

Age < 65 At-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

75

383038(253510, 578749)

Age < 65 At-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

75

659212(474785, 915279)

Age < 65 At-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

75

550(346, 876)

Age < 65 At-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

75

510(319, 814)

Age < 65 At-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

75

1374(873, 2162)

Age < 65 Not at-risk

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

216

10(10, 10)

Age < 65 Not at-risk

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

10(10, 10)

Age < 65 Not at-risk

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

10(10, 10)

Age < 65 Not at-risk

Day 1

Vaccine

Negative

Live virus-nAb MN50

216

31(31, 31)

Age < 65 Not at-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

216

5(5, 5)

Age < 65 Not at-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

216

5(5, 5)

Age < 65 Not at-risk

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

72

10(10, 10)

Age < 65 Not at-risk

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

10(10, 10)

Age < 65 Not at-risk

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

10(10, 10)

Age < 65 Not at-risk

Day 1

Vaccine

Positive

Live virus-nAb MN50

72

31(31, 31)

Age < 65 Not at-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

72

5(5, 5)

Age < 65 Not at-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

72

5(5, 5)

Age < 65 Not at-risk

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

40

10(10, 10)

Age < 65 Not at-risk

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

40

10(10, 10)

Age < 65 Not at-risk

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

40

10(10, 10)

Age < 65 Not at-risk

Day 1

Placebo

Negative

Live virus-nAb MN50

40

31(31, 31)

Age < 65 Not at-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

40

5(5, 5)

Age < 65 Not at-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

40

5(5, 5)

Age < 65 Not at-risk

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

74

10(10, 10)

Age < 65 Not at-risk

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

74

10(10, 10)

Age < 65 Not at-risk

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

74

10(10, 10)

Age < 65 Not at-risk

Day 1

Placebo

Positive

Live virus-nAb MN50

74

31(31, 31)

Age < 65 Not at-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

74

5(5, 5)

Age < 65 Not at-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

74

5(5, 5)

Age < 65 Not at-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

216

19544(15538, 24583)

Age < 65 Not at-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

19500(15882, 23941)

Age < 65 Not at-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

36983(31175, 43874)

Age < 65 Not at-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

216

135(111, 163)

Age < 65 Not at-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

216

86(69, 108)

Age < 65 Not at-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

216

193(153, 243)

Age < 65 Not at-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

72

30233(19445, 47008)

Age < 65 Not at-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

33109(22325, 49104)

Age < 65 Not at-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

62078(45232, 85198)

Age < 65 Not at-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

72

174(120, 252)

Age < 65 Not at-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

72

133(89, 198)

Age < 65 Not at-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

72

281(186, 425)

Age < 65 Not at-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

40

10(10, 10)

Age < 65 Not at-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

40

10(10, 10)

Age < 65 Not at-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

40

10(10, 10)

Age < 65 Not at-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

40

31(31, 31)

Age < 65 Not at-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

40

5(5, 5)

Age < 65 Not at-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

40

5(5, 6)

Age < 65 Not at-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

74

9353(6416, 13636)

Age < 65 Not at-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

74

8455(5990, 11934)

Age < 65 Not at-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

74

13149(10011, 17270)

Age < 65 Not at-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

74

73(54, 99)

Age < 65 Not at-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

74

37(26, 54)

Age < 65 Not at-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

74

128(85, 192)

Age < 65 Not at-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

216

334258(254171, 439580)

Age < 65 Not at-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

836616(680060, 1029211)

Age < 65 Not at-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

1924817(1613922, 2295601)

Age < 65 Not at-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

216

1212(945, 1554)

Age < 65 Not at-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

216

1436(1089, 1895)

Age < 65 Not at-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

216

2540(1939, 3325)

Age < 65 Not at-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

72

636781(384043, 1055845)

Age < 65 Not at-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

2168568(1507995, 3118502)

Age < 65 Not at-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

4902017(3734241, 6434980)

Age < 65 Not at-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

72

3461(2435, 4918)

Age < 65 Not at-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

72

3553(2126, 5936)

Age < 65 Not at-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

72

6090(3502, 10589)

Age < 65 Not at-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

40

10(10, 10)

Age < 65 Not at-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

40

10(10, 10)

Age < 65 Not at-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

40

10(10, 10)

Age < 65 Not at-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

40

31(31, 31)

Age < 65 Not at-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

40

5(5, 5)

Age < 65 Not at-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

40

5(5, 5)

Age < 65 Not at-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

74

103812(64361, 167445)

Age < 65 Not at-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

74

324898(219045, 481905)

Age < 65 Not at-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

74

490719(355848, 676707)

Age < 65 Not at-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

74

435(282, 671)

Age < 65 Not at-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

74

329(193, 560)

Age < 65 Not at-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

74

1447(910, 2301)

Age >= 65 At-risk

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

244

10(10, 10)

Age >= 65 At-risk

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

244

10(10, 10)

Age >= 65 At-risk

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

244

10(10, 10)

Age >= 65 At-risk

Day 1

Vaccine

Negative

Live virus-nAb MN50

244

31(31, 31)

Age >= 65 At-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

244

5(5, 5)

Age >= 65 At-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

244

5(5, 5)

Age >= 65 At-risk

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

53

10(10, 10)

Age >= 65 At-risk

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

53

10(10, 10)

Age >= 65 At-risk

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

53

10(10, 10)

Age >= 65 At-risk

Day 1

Vaccine

Positive

Live virus-nAb MN50

53

31(31, 31)

Age >= 65 At-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

53

5(5, 5)

Age >= 65 At-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

53

5(5, 5)

Age >= 65 At-risk

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

39

10(10, 10)

Age >= 65 At-risk

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

39

10(10, 10)

Age >= 65 At-risk

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

39

10(10, 10)

Age >= 65 At-risk

Day 1

Placebo

Negative

Live virus-nAb MN50

39

31(31, 31)

Age >= 65 At-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

39

5(5, 5)

Age >= 65 At-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

39

5(5, 5)

Age >= 65 At-risk

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

45

10(10, 10)

Age >= 65 At-risk

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

45

10(10, 10)

Age >= 65 At-risk

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

45

10(10, 10)

Age >= 65 At-risk

Day 1

Placebo

Positive

Live virus-nAb MN50

45

31(31, 31)

Age >= 65 At-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

45

5(5, 5)

Age >= 65 At-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

45

5(5, 5)

Age >= 65 At-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

244

49545(39836, 61621)

Age >= 65 At-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

244

54849(45118, 66679)

Age >= 65 At-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

244

102923(86487, 122483)

Age >= 65 At-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

244

227(185, 280)

Age >= 65 At-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

244

216(172, 272)

Age >= 65 At-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

244

363(287, 459)

Age >= 65 At-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

53

79825(53405, 119318)

Age >= 65 At-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

53

99071(69908, 140398)

Age >= 65 At-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

53

211444(154527, 289326)

Age >= 65 At-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

53

410(275, 613)

Age >= 65 At-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

53

323(217, 482)

Age >= 65 At-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

53

692(483, 992)

Age >= 65 At-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

39

10(10, 10)

Age >= 65 At-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

39

10(10, 11)

Age >= 65 At-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

39

10(10, 10)

Age >= 65 At-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

39

31(31, 31)

Age >= 65 At-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

39

5(5, 6)

Age >= 65 At-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

39

5(5, 5)

Age >= 65 At-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

45

25709(14359, 46031)

Age >= 65 At-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

45

30021(19320, 46650)

Age >= 65 At-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

45

40124(30025, 53619)

Age >= 65 At-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

45

133(82, 216)

Age >= 65 At-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

45

108(61, 190)

Age >= 65 At-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

45

242(128, 457)

Age >= 65 At-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

244

833523(633917, 1095981)

Age >= 65 At-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

244

2294936(1835361, 2869588)

Age >= 65 At-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

244

4396225(3585945, 5389596)

Age >= 65 At-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

244

2713(2142, 3438)

Age >= 65 At-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

244

3460(2575, 4650)

Age >= 65 At-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

244

5805(4327, 7790)

Age >= 65 At-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

53

2477720(1575376, 3896911)

Age >= 65 At-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

53

6362749(4433678, 9131150)

Age >= 65 At-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

53

11243710(8578951, 14736185)

Age >= 65 At-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

53

5250(3474, 7933)

Age >= 65 At-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

53

12900(6611, 25173)

Age >= 65 At-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

53

19814(11709, 33531)

Age >= 65 At-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

39

10(10, 10)

Age >= 65 At-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

39

10(10, 10)

Age >= 65 At-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

39

10(10, 10)

Age >= 65 At-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

39

31(31, 31)

Age >= 65 At-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

39

5(5, 5)

Age >= 65 At-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

39

5(5, 5)

Age >= 65 At-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

45

448178(258490, 777063)

Age >= 65 At-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

45

1508221(920499, 2471195)

Age >= 65 At-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

45

2216494(1489129, 3299140)

Age >= 65 At-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

45

1539(883, 2683)

Age >= 65 At-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

45

2108(1021, 4350)

Age >= 65 At-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

45

2609(1286, 5293)

Age >= 65 Not at-risk

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

228

10(10, 10)

Age >= 65 Not at-risk

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

228

10(10, 10)

Age >= 65 Not at-risk

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

228

10(10, 10)

Age >= 65 Not at-risk

Day 1

Vaccine

Negative

Live virus-nAb MN50

228

31(31, 31)

Age >= 65 Not at-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

228

5(5, 5)

Age >= 65 Not at-risk

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

228

5(5, 5)

Age >= 65 Not at-risk

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

75

10(10, 10)

Age >= 65 Not at-risk

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

75

10(10, 10)

Age >= 65 Not at-risk

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

75

10(10, 10)

Age >= 65 Not at-risk

Day 1

Vaccine

Positive

Live virus-nAb MN50

75

31(31, 31)

Age >= 65 Not at-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

75

5(5, 5)

Age >= 65 Not at-risk

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

75

5(5, 5)

Age >= 65 Not at-risk

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

37

10(10, 10)

Age >= 65 Not at-risk

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

37

10(10, 10)

Age >= 65 Not at-risk

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

37

10(10, 10)

Age >= 65 Not at-risk

Day 1

Placebo

Negative

Live virus-nAb MN50

37

31(31, 31)

Age >= 65 Not at-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

37

5(5, 5)

Age >= 65 Not at-risk

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

37

5(5, 5)

Age >= 65 Not at-risk

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

76

10(10, 10)

Age >= 65 Not at-risk

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

76

10(10, 10)

Age >= 65 Not at-risk

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

76

10(10, 10)

Age >= 65 Not at-risk

Day 1

Placebo

Positive

Live virus-nAb MN50

76

31(31, 31)

Age >= 65 Not at-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

76

5(5, 5)

Age >= 65 Not at-risk

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

76

5(5, 5)

Age >= 65 Not at-risk

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

228

81142(64826, 101565)

Age >= 65 Not at-risk

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

228

93960(77358, 114124)

Age >= 65 Not at-risk

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

228

158956(135136, 186975)

Age >= 65 Not at-risk

Day 29

Vaccine

Negative

Live virus-nAb MN50

228

290(232, 362)

Age >= 65 Not at-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

228

359(286, 449)

Age >= 65 Not at-risk

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

228

554(438, 701)

Age >= 65 Not at-risk

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

75

123517(80177, 190287)

Age >= 65 Not at-risk

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

75

114859(83777, 157474)

Age >= 65 Not at-risk

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

75

238678(186461, 305518)

Age >= 65 Not at-risk

Day 29

Vaccine

Positive

Live virus-nAb MN50

75

463(319, 671)

Age >= 65 Not at-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

75

546(366, 815)

Age >= 65 Not at-risk

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

75

856(559, 1312)

Age >= 65 Not at-risk

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

37

10(10, 10)

Age >= 65 Not at-risk

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

37

10(10, 10)

Age >= 65 Not at-risk

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

37

10(10, 10)

Age >= 65 Not at-risk

Day 29

Placebo

Negative

Live virus-nAb MN50

37

31(31, 31)

Age >= 65 Not at-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

37

5(5, 5)

Age >= 65 Not at-risk

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

37

5(5, 5)

Age >= 65 Not at-risk

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

76

36294(24581, 53589)

Age >= 65 Not at-risk

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

76

45846(33364, 62997)

Age >= 65 Not at-risk

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

76

61223(47794, 78426)

Age >= 65 Not at-risk

Day 29

Placebo

Positive

Live virus-nAb MN50

76

172(124, 239)

Age >= 65 Not at-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

76

153(106, 219)

Age >= 65 Not at-risk

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

76

297(207, 425)

Age >= 65 Not at-risk

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

228

1398099(1078520, 1812374)

Age >= 65 Not at-risk

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

228

4101890(3391549, 4961009)

Age >= 65 Not at-risk

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

228

8213421(7089936, 9514935)

Age >= 65 Not at-risk

Day 57

Vaccine

Negative

Live virus-nAb MN50

228

3250(2538, 4162)

Age >= 65 Not at-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

228

7341(5507, 9786)

Age >= 65 Not at-risk

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

228

6853(5155, 9111)

Age >= 65 Not at-risk

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

75

3174630(2087124, 4828787)

Age >= 65 Not at-risk

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

75

6970743(5512037, 8815480)

Age >= 65 Not at-risk

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

75

14775510(13154081, 16596803)

Age >= 65 Not at-risk

Day 57

Vaccine

Positive

Live virus-nAb MN50

75

7935(5831, 10799)

Age >= 65 Not at-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

75

23161(14027, 38241)

Age >= 65 Not at-risk

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

75

23228(14231, 37913)

Age >= 65 Not at-risk

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

37

10(10, 10)

Age >= 65 Not at-risk

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

37

10(10, 10)

Age >= 65 Not at-risk

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

37

10(10, 10)

Age >= 65 Not at-risk

Day 57

Placebo

Negative

Live virus-nAb MN50

37

31(31, 31)

Age >= 65 Not at-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

37

5(5, 5)

Age >= 65 Not at-risk

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

37

5(5, 5)

Age >= 65 Not at-risk

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

76

592400(385720, 909825)

Age >= 65 Not at-risk

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

76

1704740(1240372, 2342956)

Age >= 65 Not at-risk

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

76

2958150(2280493, 3837175)

Age >= 65 Not at-risk

Day 57

Placebo

Positive

Live virus-nAb MN50

76

1796(1171, 2753)

Age >= 65 Not at-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

76

2375(1471, 3837)

Age >= 65 Not at-risk

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

76

4155(2631, 6560)

Table 5e. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Sex

Group

Visit

Arm

Baseline COVID

Marker

N

GMT/GMC

Sex

Female

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

511

10(10, 10)

Female

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

511

10(10, 10)

Female

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

511

10(10, 10)

Female

Day 1

Vaccine

Negative

Live virus-nAb MN50

511

31(31, 31)

Female

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

511

5(5, 5)

Female

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

511

5(5, 5)

Female

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

149

10(10, 10)

Female

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

149

10(10, 10)

Female

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

149

10(10, 10)

Female

Day 1

Vaccine

Positive

Live virus-nAb MN50

149

31(31, 31)

Female

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

149

5(5, 5)

Female

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

149

5(5, 5)

Female

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

85

10(10, 10)

Female

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

85

10(10, 10)

Female

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

85

10(10, 10)

Female

Day 1

Placebo

Negative

Live virus-nAb MN50

85

31(31, 31)

Female

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

85

5(5, 5)

Female

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

85

5(5, 5)

Female

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

149

10(10, 10)

Female

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

149

10(10, 10)

Female

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

149

10(10, 10)

Female

Day 1

Placebo

Positive

Live virus-nAb MN50

149

31(31, 31)

Female

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

149

5(5, 5)

Female

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

149

5(5, 5)

Female

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

511

24675(20170, 30188)

Female

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

511

23270(19286, 28078)

Female

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

511

48501(41686, 56429)

Female

Day 29

Vaccine

Negative

Live virus-nAb MN50

511

143(121, 168)

Female

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

511

105(86, 127)

Female

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

511

208(168, 256)

Female

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

149

40523(26281, 62486)

Female

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

149

39866(27351, 58108)

Female

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

149

76435(56772, 102910)

Female

Day 29

Vaccine

Positive

Live virus-nAb MN50

149

206(144, 296)

Female

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

149

176(117, 264)

Female

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

149

340(219, 529)

Female

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

85

10(10, 10)

Female

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

85

10(10, 10)

Female

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

85

10(10, 10)

Female

Day 29

Placebo

Negative

Live virus-nAb MN50

85

31(31, 31)

Female

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

85

5(5, 5)

Female

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

85

5(5, 5)

Female

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

149

10162(6967, 14822)

Female

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

149

11046(8047, 15164)

Female

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

149

16347(12596, 21215)

Female

Day 29

Placebo

Positive

Live virus-nAb MN50

149

85(63, 115)

Female

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

149

49(34, 70)

Female

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

149

147(101, 215)

Female

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

511

400820(314179, 511355)

Female

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

511

1145402(944407, 1389174)

Female

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

511

2398857(2045123, 2813774)

Female

Day 57

Vaccine

Negative

Live virus-nAb MN50

511

1406(1123, 1760)

Female

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

511

1667(1313, 2116)

Female

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

511

2894(2310, 3625)

Female

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

149

880697(553974, 1400115)

Female

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

149

2676980(1849659, 3874348)

Female

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

149

5513577(4222152, 7200008)

Female

Day 57

Vaccine

Positive

Live virus-nAb MN50

149

3595(2579, 5011)

Female

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

149

4659(3056, 7103)

Female

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

149

8107(5219, 12593)

Female

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

85

10(10, 10)

Female

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

85

10(10, 10)

Female

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

85

10(10, 10)

Female

Day 57

Placebo

Negative

Live virus-nAb MN50

85

31(31, 31)

Female

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

85

5(5, 5)

Female

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

85

5(5, 5)

Female

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

149

127886(80843, 202302)

Female

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

149

433107(297108, 631359)

Female

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

149

735382(548585, 985783)

Female

Day 57

Placebo

Positive

Live virus-nAb MN50

149

546(359, 832)

Female

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

149

537(320, 900)

Female

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

149

1609(1018, 2543)

Male

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

393

10(10, 10)

Male

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

393

10(10, 10)

Male

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

393

10(10, 10)

Male

Day 1

Vaccine

Negative

Live virus-nAb MN50

393

31(31, 31)

Male

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

393

5(5, 5)

Male

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

393

5(5, 5)

Male

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

124

10(10, 10)

Male

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

124

10(10, 10)

Male

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

124

10(10, 10)

Male

Day 1

Vaccine

Positive

Live virus-nAb MN50

124

31(31, 31)

Male

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

124

5(5, 5)

Male

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

124

5(5, 5)

Male

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

70

10(10, 10)

Male

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

70

10(10, 10)

Male

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

70

10(10, 10)

Male

Day 1

Placebo

Negative

Live virus-nAb MN50

70

31(31, 31)

Male

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

70

5(5, 5)

Male

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

70

5(5, 5)

Male

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

121

10(10, 10)

Male

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

121

10(10, 10)

Male

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

121

10(10, 10)

Male

Day 1

Placebo

Positive

Live virus-nAb MN50

121

31(31, 31)

Male

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

121

5(5, 5)

Male

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

121

5(5, 5)

Male

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

393

23651(18727, 29871)

Male

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

393

26846(21982, 32786)

Male

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

393

43637(36731, 51842)

Male

Day 29

Vaccine

Negative

Live virus-nAb MN50

393

159(130, 196)

Male

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

393

108(85, 136)

Male

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

393

230(183, 289)

Male

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

124

37143(24890, 55427)

Male

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

124

41050(28647, 58823)

Male

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

124

85380(63299, 115163)

Male

Day 29

Vaccine

Positive

Live virus-nAb MN50

124

214(153, 299)

Male

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

124

170(120, 241)

Male

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

124

333(241, 462)

Male

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

70

10(10, 10)

Male

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

70

10(10, 10)

Male

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

70

10(10, 10)

Male

Day 29

Placebo

Negative

Live virus-nAb MN50

70

31(31, 31)

Male

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

70

5(5, 5)

Male

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

70

5(5, 6)

Male

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

121

16104(11768, 22037)

Male

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

121

13373(9368, 19089)

Male

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

121

21013(16320, 27055)

Male

Day 29

Placebo

Positive

Live virus-nAb MN50

121

92(71, 119)

Male

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

121

54(39, 75)

Male

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

121

155(105, 229)

Male

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

393

403945(306778, 531888)

Male

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

393

989572(809739, 1209345)

Male

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

393

2287936(1911349, 2738720)

Male

Day 57

Vaccine

Negative

Live virus-nAb MN50

393

1543(1209, 1968)

Male

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

393

1945(1450, 2608)

Male

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

393

2907(2163, 3906)

Male

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

124

837070(508960, 1376704)

Male

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

124

2687473(1984480, 3639499)

Male

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

124

6154788(4871860, 7775556)

Male

Day 57

Vaccine

Positive

Live virus-nAb MN50

124

4117(2977, 5694)

Male

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

124

4857(2726, 8655)

Male

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

124

7468(4045, 13788)

Male

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

70

10(10, 10)

Male

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

70

10(10, 10)

Male

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

70

10(10, 10)

Male

Day 57

Placebo

Negative

Live virus-nAb MN50

70

31(31, 31)

Male

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

70

5(5, 5)

Male

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

70

5(5, 5)

Male

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

121

191945(124873, 295044)

Male

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

121

509328(355055, 730634)

Male

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

121

706692(517642, 964786)

Male

Day 57

Placebo

Positive

Live virus-nAb MN50

121

675(455, 1001)

Male

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

121

498(317, 783)

Male

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

121

1885(1264, 2810)

Table 5f. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, sex

Group

Visit

Arm

Baseline COVID

Marker

N

GMT/GMC

Age, sex

Age < 65 Female

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

245

10(10, 10)

Age < 65 Female

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

245

10(10, 10)

Age < 65 Female

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

245

10(10, 10)

Age < 65 Female

Day 1

Vaccine

Negative

Live virus-nAb MN50

245

31(31, 31)

Age < 65 Female

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

245

5(5, 5)

Age < 65 Female

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

245

5(5, 5)

Age < 65 Female

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

77

10(10, 10)

Age < 65 Female

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

77

10(10, 10)

Age < 65 Female

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

77

10(10, 10)

Age < 65 Female

Day 1

Vaccine

Positive

Live virus-nAb MN50

77

31(31, 31)

Age < 65 Female

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

77

5(5, 5)

Age < 65 Female

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

77

5(5, 5)

Age < 65 Female

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

45

10(10, 10)

Age < 65 Female

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

45

10(10, 10)

Age < 65 Female

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

45

10(10, 10)

Age < 65 Female

Day 1

Placebo

Negative

Live virus-nAb MN50

45

31(31, 31)

Age < 65 Female

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

45

5(5, 5)

Age < 65 Female

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

45

5(5, 5)

Age < 65 Female

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

89

10(10, 10)

Age < 65 Female

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

89

10(10, 10)

Age < 65 Female

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

89

10(10, 10)

Age < 65 Female

Day 1

Placebo

Positive

Live virus-nAb MN50

89

31(31, 31)

Age < 65 Female

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

89

5(5, 6)

Age < 65 Female

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

89

5(5, 5)

Age < 65 Female

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

245

18805(14651, 24138)

Age < 65 Female

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

245

17080(13531, 21561)

Age < 65 Female

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

245

36784(30495, 44371)

Age < 65 Female

Day 29

Vaccine

Negative

Live virus-nAb MN50

245

122(100, 149)

Age < 65 Female

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

245

81(63, 102)

Age < 65 Female

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

245

170(131, 221)

Age < 65 Female

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

77

32426(18936, 55526)

Age < 65 Female

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

77

31223(19512, 49964)

Age < 65 Female

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

77

58267(40204, 84446)

Age < 65 Female

Day 29

Vaccine

Positive

Live virus-nAb MN50

77

167(107, 262)

Age < 65 Female

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

77

142(86, 236)

Age < 65 Female

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

77

281(162, 485)

Age < 65 Female

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

45

10(10, 10)

Age < 65 Female

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

45

10(10, 10)

Age < 65 Female

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

45

10(10, 10)

Age < 65 Female

Day 29

Placebo

Negative

Live virus-nAb MN50

45

31(31, 31)

Age < 65 Female

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

45

5(5, 5)

Age < 65 Female

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

45

5(5, 5)

Age < 65 Female

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

89

8481(5442, 13217)

Age < 65 Female

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

89

8619(5926, 12535)

Age < 65 Female

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

89

13365(9818, 18194)

Age < 65 Female

Day 29

Placebo

Positive

Live virus-nAb MN50

89

80(56, 115)

Age < 65 Female

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

89

42(28, 64)

Age < 65 Female

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

89

142(90, 222)

Age < 65 Female

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

245

305392(225868, 412914)

Age < 65 Female

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

245

871117(685980, 1106221)

Age < 65 Female

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

245

1848519(1516807, 2252774)

Age < 65 Female

Day 57

Vaccine

Negative

Live virus-nAb MN50

245

1169(886, 1544)

Age < 65 Female

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

245

1218(908, 1635)

Age < 65 Female

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

245

2344(1778, 3091)

Age < 65 Female

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

77

626692(351749, 1116543)

Age < 65 Female

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

77

2096714(1319664, 3331310)

Age < 65 Female

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

77

4296627(3069038, 6015241)

Age < 65 Female

Day 57

Vaccine

Positive

Live virus-nAb MN50

77

2954(1953, 4469)

Age < 65 Female

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

77

3157(1886, 5287)

Age < 65 Female

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

77

6212(3603, 10709)

Age < 65 Female

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

45

10(10, 10)

Age < 65 Female

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

45

10(10, 10)

Age < 65 Female

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

45

10(10, 10)

Age < 65 Female

Day 57

Placebo

Negative

Live virus-nAb MN50

45

31(31, 31)

Age < 65 Female

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

45

5(5, 6)

Age < 65 Female

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

45

5(5, 5)

Age < 65 Female

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

89

101287(58876, 174249)

Age < 65 Female

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

89

334614(214228, 522650)

Age < 65 Female

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

89

586813(415547, 828663)

Age < 65 Female

Day 57

Placebo

Positive

Live virus-nAb MN50

89

439(267, 720)

Age < 65 Female

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

89

413(225, 758)

Age < 65 Female

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

89

1417(826, 2431)

Age < 65 Male

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

187

10(10, 10)

Age < 65 Male

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

187

10(10, 10)

Age < 65 Male

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

187

10(10, 10)

Age < 65 Male

Day 1

Vaccine

Negative

Live virus-nAb MN50

187

31(31, 31)

Age < 65 Male

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

187

5(5, 5)

Age < 65 Male

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

187

5(5, 5)

Age < 65 Male

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

68

10(10, 10)

Age < 65 Male

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

68

10(10, 10)

Age < 65 Male

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

68

10(10, 10)

Age < 65 Male

Day 1

Vaccine

Positive

Live virus-nAb MN50

68

31(31, 31)

Age < 65 Male

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

68

5(5, 5)

Age < 65 Male

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

68

5(5, 5)

Age < 65 Male

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

34

10(10, 10)

Age < 65 Male

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

34

10(10, 10)

Age < 65 Male

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

34

10(10, 10)

Age < 65 Male

Day 1

Placebo

Negative

Live virus-nAb MN50

34

31(31, 31)

Age < 65 Male

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

34

5(5, 5)

Age < 65 Male

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

34

5(5, 6)

Age < 65 Male

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

60

10(10, 10)

Age < 65 Male

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

60

10(10, 10)

Age < 65 Male

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

60

10(10, 10)

Age < 65 Male

Day 1

Placebo

Positive

Live virus-nAb MN50

60

31(31, 31)

Age < 65 Male

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

60

5(5, 5)

Age < 65 Male

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

60

5(5, 5)

Age < 65 Male

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

187

18470(13815, 24695)

Age < 65 Male

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

187

20671(16126, 26498)

Age < 65 Male

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

187

33145(26769, 41040)

Age < 65 Male

Day 29

Vaccine

Negative

Live virus-nAb MN50

187

139(108, 180)

Age < 65 Male

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

187

83(62, 111)

Age < 65 Male

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

187

189(142, 251)

Age < 65 Male

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

68

28434(17580, 45989)

Age < 65 Male

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

68

31959(20688, 49370)

Age < 65 Male

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

68

66513(46326, 95499)

Age < 65 Male

Day 29

Vaccine

Positive

Live virus-nAb MN50

68

183(123, 272)

Age < 65 Male

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

68

131(86, 199)

Age < 65 Male

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

68

264(179, 389)

Age < 65 Male

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

34

10(10, 10)

Age < 65 Male

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

34

10(10, 10)

Age < 65 Male

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

34

10(10, 10)

Age < 65 Male

Day 29

Placebo

Negative

Live virus-nAb MN50

34

31(31, 31)

Age < 65 Male

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

34

5(5, 5)

Age < 65 Male

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

34

5(5, 6)

Age < 65 Male

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

60

11758(7947, 17397)

Age < 65 Male

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

60

9178(5805, 14509)

Age < 65 Male

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

60

14597(10534, 20227)

Age < 65 Male

Day 29

Placebo

Positive

Live virus-nAb MN50

60

69(50, 94)

Age < 65 Male

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

60

36(24, 55)

Age < 65 Male

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

60

110(67, 182)

Age < 65 Male

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

187

310782(220797, 437440)

Age < 65 Male

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

187

734157(572734, 941076)

Age < 65 Male

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

187

1788737(1432560, 2233471)

Age < 65 Male

Day 57

Vaccine

Negative

Live virus-nAb MN50

187

1261(931, 1708)

Age < 65 Male

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

187

1531(1064, 2203)

Age < 65 Male

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

187

2351(1629, 3394)

Age < 65 Male

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

68

646934(353933, 1182493)

Age < 65 Male

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

68

2168221(1503263, 3127319)

Age < 65 Male

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

68

5253653(3964058, 6962780)

Age < 65 Male

Day 57

Vaccine

Positive

Live virus-nAb MN50

68

3812(2592, 5607)

Age < 65 Male

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

68

3682(1837, 7380)

Age < 65 Male

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

68

5840(2775, 12288)

Age < 65 Male

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

34

10(10, 10)

Age < 65 Male

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

34

10(10, 10)

Age < 65 Male

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

34

10(10, 10)

Age < 65 Male

Day 57

Placebo

Negative

Live virus-nAb MN50

34

31(31, 31)

Age < 65 Male

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

34

5(5, 5)

Age < 65 Male

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

34

5(5, 5)

Age < 65 Male

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

60

123721(71099, 215288)

Age < 65 Male

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

60

337499(211581, 538355)

Age < 65 Male

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

60

425662(283055, 640116)

Age < 65 Male

Day 57

Placebo

Positive

Live virus-nAb MN50

60

486(294, 804)

Age < 65 Male

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

60

283(159, 504)

Age < 65 Male

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

60

1458(885, 2399)

Age >= 65 Female

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

266

10(10, 10)

Age >= 65 Female

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

266

10(10, 10)

Age >= 65 Female

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

266

10(10, 10)

Age >= 65 Female

Day 1

Vaccine

Negative

Live virus-nAb MN50

266

31(31, 31)

Age >= 65 Female

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

266

5(5, 5)

Age >= 65 Female

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

266

5(5, 5)

Age >= 65 Female

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

72

10(10, 10)

Age >= 65 Female

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

10(10, 10)

Age >= 65 Female

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

10(10, 10)

Age >= 65 Female

Day 1

Vaccine

Positive

Live virus-nAb MN50

72

31(31, 31)

Age >= 65 Female

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

72

5(5, 5)

Age >= 65 Female

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

72

5(5, 5)

Age >= 65 Female

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

40

10(10, 10)

Age >= 65 Female

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

40

10(10, 10)

Age >= 65 Female

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

40

10(10, 10)

Age >= 65 Female

Day 1

Placebo

Negative

Live virus-nAb MN50

40

31(31, 31)

Age >= 65 Female

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

40

5(5, 5)

Age >= 65 Female

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

40

5(5, 5)

Age >= 65 Female

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

60

10(10, 10)

Age >= 65 Female

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

60

10(10, 10)

Age >= 65 Female

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

60

10(10, 11)

Age >= 65 Female

Day 1

Placebo

Positive

Live virus-nAb MN50

60

31(31, 31)

Age >= 65 Female

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

60

5(5, 5)

Age >= 65 Female

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

60

5(5, 5)

Age >= 65 Female

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

266

67487(54656, 83329)

Age >= 65 Female

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

266

73151(60529, 88405)

Age >= 65 Female

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

266

135051(115339, 158132)

Age >= 65 Female

Day 29

Vaccine

Negative

Live virus-nAb MN50

266

254(207, 311)

Age >= 65 Female

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

266

278(223, 346)

Age >= 65 Female

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

266

434(347, 543)

Age >= 65 Female

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

72

93762(63053, 139429)

Age >= 65 Female

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

99994(73999, 135122)

Age >= 65 Female

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

212260(167267, 269355)

Age >= 65 Female

Day 29

Vaccine

Positive

Live virus-nAb MN50

72

454(323, 639)

Age >= 65 Female

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

72

387(259, 577)

Age >= 65 Female

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

72

704(481, 1030)

Age >= 65 Female

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

40

10(10, 10)

Age >= 65 Female

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

40

10(10, 11)

Age >= 65 Female

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

40

10(10, 10)

Age >= 65 Female

Day 29

Placebo

Negative

Live virus-nAb MN50

40

31(31, 31)

Age >= 65 Female

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

40

5(5, 5)

Age >= 65 Female

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

40

5(5, 5)

Age >= 65 Female

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

60

25075(15874, 39610)

Age >= 65 Female

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

60

38154(27521, 52895)

Age >= 65 Female

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

60

44708(34466, 57994)

Age >= 65 Female

Day 29

Placebo

Positive

Live virus-nAb MN50

60

113(81, 157)

Age >= 65 Female

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

60

104(68, 159)

Age >= 65 Female

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

60

179(120, 268)

Age >= 65 Female

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

266

1097274(851584, 1413848)

Age >= 65 Female

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

266

3156766(2580313, 3862000)

Age >= 65 Female

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

266

6297614(5350848, 7411898)

Age >= 65 Female

Day 57

Vaccine

Negative

Live virus-nAb MN50

266

2786(2191, 3543)

Age >= 65 Female

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

266

5321(4036, 7016)

Age >= 65 Female

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

266

6315(4804, 8301)

Age >= 65 Female

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

72

3169036(2144423, 4683211)

Age >= 65 Female

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

6713448(5202553, 8663129)

Age >= 65 Female

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

14093295(12598095, 15765954)

Age >= 65 Female

Day 57

Vaccine

Positive

Live virus-nAb MN50

72

7521(5707, 9910)

Age >= 65 Female

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

72

20148(11972, 33907)

Age >= 65 Female

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

72

22089(14149, 34485)

Age >= 65 Female

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

40

10(10, 10)

Age >= 65 Female

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

40

10(10, 10)

Age >= 65 Female

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

40

10(10, 10)

Age >= 65 Female

Day 57

Placebo

Negative

Live virus-nAb MN50

40

31(31, 31)

Age >= 65 Female

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

40

5(5, 5)

Age >= 65 Female

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

40

5(5, 5)

Age >= 65 Female

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

60

409910(257632, 652197)

Age >= 65 Female

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

60

1571516(1075941, 2295351)

Age >= 65 Female

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

60

2270459(1617907, 3186205)

Age >= 65 Female

Day 57

Placebo

Positive

Live virus-nAb MN50

60

1636(1014, 2639)

Age >= 65 Female

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

60

1992(1103, 3599)

Age >= 65 Female

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

60

3037(1821, 5064)

Age >= 65 Male

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

206

10(10, 10)

Age >= 65 Male

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

206

10(10, 10)

Age >= 65 Male

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

206

10(10, 10)

Age >= 65 Male

Day 1

Vaccine

Negative

Live virus-nAb MN50

206

31(31, 31)

Age >= 65 Male

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

206

5(5, 5)

Age >= 65 Male

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

206

5(5, 5)

Age >= 65 Male

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

56

10(10, 10)

Age >= 65 Male

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

10(10, 10)

Age >= 65 Male

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

10(10, 10)

Age >= 65 Male

Day 1

Vaccine

Positive

Live virus-nAb MN50

56

31(31, 31)

Age >= 65 Male

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

56

5(5, 5)

Age >= 65 Male

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

56

5(5, 5)

Age >= 65 Male

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

36

10(10, 10)

Age >= 65 Male

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

36

10(10, 10)

Age >= 65 Male

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

36

10(10, 10)

Age >= 65 Male

Day 1

Placebo

Negative

Live virus-nAb MN50

36

31(31, 31)

Age >= 65 Male

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

36

5(5, 5)

Age >= 65 Male

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

36

5(5, 5)

Age >= 65 Male

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

61

10(10, 10)

Age >= 65 Male

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

61

10(10, 10)

Age >= 65 Male

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

61

10(10, 10)

Age >= 65 Male

Day 1

Placebo

Positive

Live virus-nAb MN50

61

31(31, 31)

Age >= 65 Male

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

61

5(5, 5)

Age >= 65 Male

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

61

5(5, 5)

Age >= 65 Male

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

206

57987(45655, 73648)

Age >= 65 Male

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

206

69276(56159, 85458)

Age >= 65 Male

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

206

118317(98129, 142658)

Age >= 65 Male

Day 29

Vaccine

Negative

Live virus-nAb MN50

206

259(205, 326)

Age >= 65 Male

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

206

276(216, 351)

Age >= 65 Male

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

206

463(360, 595)

Age >= 65 Male

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

56

115818(71017, 188880)

Age >= 65 Male

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

119141(80977, 175292)

Age >= 65 Male

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

247139(179079, 341065)

Age >= 65 Male

Day 29

Vaccine

Positive

Live virus-nAb MN50

56

423(270, 662)

Age >= 65 Male

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

56

516(333, 799)

Age >= 65 Male

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

56

899(572, 1413)

Age >= 65 Male

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

36

10(10, 10)

Age >= 65 Male

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

36

10(10, 10)

Age >= 65 Male

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

36

10(10, 10)

Age >= 65 Male

Day 29

Placebo

Negative

Live virus-nAb MN50

36

31(31, 31)

Age >= 65 Male

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

36

5(5, 5)

Age >= 65 Male

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

36

5(5, 5)

Age >= 65 Male

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

61

40150(25517, 63173)

Age >= 65 Male

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

61

39910(26711, 59631)

Age >= 65 Male

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

61

60548(45961, 79765)

Age >= 65 Male

Day 29

Placebo

Positive

Live virus-nAb MN50

61

214(142, 322)

Age >= 65 Male

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

61

171(110, 266)

Age >= 65 Male

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

61

416(257, 673)

Age >= 65 Male

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

206

1045477(782982, 1395974)

Age >= 65 Male

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

206

2922278(2336145, 3655469)

Age >= 65 Male

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

206

5586775(4531616, 6887621)

Age >= 65 Male

Day 57

Vaccine

Negative

Live virus-nAb MN50

206

3204(2519, 4077)

Age >= 65 Male

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

206

4630(3361, 6377)

Age >= 65 Male

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

206

6275(4603, 8555)

Age >= 65 Male

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

56

2506469(1521534, 4128984)

Age >= 65 Male

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

6702157(4808091, 9342358)

Age >= 65 Male

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

12073936(9223667, 15804987)

Age >= 65 Male

Day 57

Vaccine

Positive

Live virus-nAb MN50

56

5714(3618, 9024)

Age >= 65 Male

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

56

15785(7993, 31174)

Age >= 65 Male

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

56

21269(11638, 38869)

Age >= 65 Male

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

36

10(10, 10)

Age >= 65 Male

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

36

10(10, 10)

Age >= 65 Male

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

36

10(10, 10)

Age >= 65 Male

Day 57

Placebo

Negative

Live virus-nAb MN50

36

31(31, 31)

Age >= 65 Male

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

36

5(5, 5)

Age >= 65 Male

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

36

5(5, 5)

Age >= 65 Male

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

61

687405(426013, 1109182)

Age >= 65 Male

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

61

1683254(1149840, 2464121)

Age >= 65 Male

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

61

3081458(2351502, 4038007)

Age >= 65 Male

Day 57

Placebo

Positive

Live virus-nAb MN50

61

1751(1083, 2831)

Age >= 65 Male

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

61

2577(1485, 4473)

Age >= 65 Male

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

61

3976(2223, 7112)

Table 5g. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Hispanic or Latino ethnicity

Group

Visit

Arm

Baseline COVID

Marker

N

GMT/GMC

Hispanic or Latino ethnicity

Hispanic or Latino

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

112

10(10, 10)

Hispanic or Latino

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

112

10(10, 10)

Hispanic or Latino

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

112

10(10, 10)

Hispanic or Latino

Day 1

Vaccine

Negative

Live virus-nAb MN50

112

31(31, 31)

Hispanic or Latino

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

112

5(5, 5)

Hispanic or Latino

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

112

5(5, 6)

Hispanic or Latino

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

38

10(10, 10)

Hispanic or Latino

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

38

10(10, 10)

Hispanic or Latino

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

38

10(10, 10)

Hispanic or Latino

Day 1

Vaccine

Positive

Live virus-nAb MN50

38

31(31, 31)

Hispanic or Latino

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

38

5(5, 5)

Hispanic or Latino

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

38

5(5, 5)

Hispanic or Latino

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

20

10(10, 10)

Hispanic or Latino

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

20

10(10, 10)

Hispanic or Latino

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

20

10(10, 10)

Hispanic or Latino

Day 1

Placebo

Negative

Live virus-nAb MN50

20

31(31, 31)

Hispanic or Latino

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

20

5(5, 5)

Hispanic or Latino

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

20

5(5, 5)

Hispanic or Latino

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

45

10(10, 10)

Hispanic or Latino

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

45

10(10, 10)

Hispanic or Latino

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

45

10(10, 10)

Hispanic or Latino

Day 1

Placebo

Positive

Live virus-nAb MN50

45

31(31, 31)

Hispanic or Latino

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

45

5(5, 5)

Hispanic or Latino

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

45

5(5, 5)

Hispanic or Latino

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

112

17300(10454, 28630)

Hispanic or Latino

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

112

21079(13535, 32828)

Hispanic or Latino

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

112

41454(27925, 61537)

Hispanic or Latino

Day 29

Vaccine

Negative

Live virus-nAb MN50

112

105(77, 143)

Hispanic or Latino

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

112

77(49, 122)

Hispanic or Latino

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

112

159(105, 241)

Hispanic or Latino

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

38

42228(22471, 79357)

Hispanic or Latino

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

38

50892(30166, 85856)

Hispanic or Latino

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

38

85084(58117, 124565)

Hispanic or Latino

Day 29

Vaccine

Positive

Live virus-nAb MN50

38

281(151, 524)

Hispanic or Latino

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

38

197(108, 362)

Hispanic or Latino

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

38

351(193, 638)

Hispanic or Latino

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

20

10(10, 10)

Hispanic or Latino

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

20

10(10, 11)

Hispanic or Latino

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

20

10(10, 10)

Hispanic or Latino

Day 29

Placebo

Negative

Live virus-nAb MN50

20

31(31, 31)

Hispanic or Latino

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

20

5(5, 5)

Hispanic or Latino

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

20

5(5, 5)

Hispanic or Latino

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

45

15333(8092, 29052)

Hispanic or Latino

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

45

14454(8294, 25189)

Hispanic or Latino

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

45

22217(16404, 30091)

Hispanic or Latino

Day 29

Placebo

Positive

Live virus-nAb MN50

45

69(49, 96)

Hispanic or Latino

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

45

55(30, 101)

Hispanic or Latino

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

45

141(84, 236)

Hispanic or Latino

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

112

328439(166727, 646999)

Hispanic or Latino

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

112

862213(552408, 1345763)

Hispanic or Latino

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

112

2101292(1544642, 2858545)

Hispanic or Latino

Day 57

Vaccine

Negative

Live virus-nAb MN50

112

1167(732, 1862)

Hispanic or Latino

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

112

1893(1142, 3138)

Hispanic or Latino

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

112

1726(1067, 2792)

Hispanic or Latino

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

38

1195899(552115, 2590357)

Hispanic or Latino

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

38

4778590(2571795, 8878980)

Hispanic or Latino

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

38

7316965(4930528, 10858466)

Hispanic or Latino

Day 57

Vaccine

Positive

Live virus-nAb MN50

38

2840(1447, 5575)

Hispanic or Latino

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

38

6497(2827, 14932)

Hispanic or Latino

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

38

7944(3075, 20525)

Hispanic or Latino

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

20

10(10, 10)

Hispanic or Latino

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

20

10(10, 10)

Hispanic or Latino

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

20

10(10, 10)

Hispanic or Latino

Day 57

Placebo

Negative

Live virus-nAb MN50

20

31(31, 31)

Hispanic or Latino

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

20

5(5, 5)

Hispanic or Latino

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

20

5(5, 5)

Hispanic or Latino

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

45

104344(59705, 182357)

Hispanic or Latino

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

45

463502(275148, 780794)

Hispanic or Latino

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

45

787311(464021, 1335841)

Hispanic or Latino

Day 57

Placebo

Positive

Live virus-nAb MN50

45

620(316, 1216)

Hispanic or Latino

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

45

668(366, 1221)

Hispanic or Latino

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

45

1601(840, 3053)

Not Hispanic or Latino

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

723

10(10, 10)

Not Hispanic or Latino

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

723

10(10, 10)

Not Hispanic or Latino

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

723

10(10, 10)

Not Hispanic or Latino

Day 1

Vaccine

Negative

Live virus-nAb MN50

723

31(31, 31)

Not Hispanic or Latino

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

723

5(5, 5)

Not Hispanic or Latino

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

723

5(5, 5)

Not Hispanic or Latino

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

208

10(10, 10)

Not Hispanic or Latino

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

208

10(10, 10)

Not Hispanic or Latino

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

208

10(10, 10)

Not Hispanic or Latino

Day 1

Vaccine

Positive

Live virus-nAb MN50

208

31(31, 31)

Not Hispanic or Latino

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

208

5(5, 5)

Not Hispanic or Latino

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

208

5(5, 5)

Not Hispanic or Latino

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

119

10(10, 10)

Not Hispanic or Latino

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

119

10(10, 10)

Not Hispanic or Latino

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

119

10(10, 10)

Not Hispanic or Latino

Day 1

Placebo

Negative

Live virus-nAb MN50

119

31(31, 31)

Not Hispanic or Latino

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

119

5(5, 5)

Not Hispanic or Latino

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

119

5(5, 5)

Not Hispanic or Latino

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

198

10(10, 10)

Not Hispanic or Latino

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

198

10(10, 10)

Not Hispanic or Latino

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

198

10(10, 10)

Not Hispanic or Latino

Day 1

Placebo

Positive

Live virus-nAb MN50

198

31(31, 31)

Not Hispanic or Latino

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

198

5(5, 5)

Not Hispanic or Latino

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

198

5(5, 5)

Not Hispanic or Latino

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

723

24177(20485, 28533)

Not Hispanic or Latino

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

723

25435(21965, 29454)

Not Hispanic or Latino

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

723

46892(41468, 53025)

Not Hispanic or Latino

Day 29

Vaccine

Negative

Live virus-nAb MN50

723

154(134, 178)

Not Hispanic or Latino

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

723

107(91, 126)

Not Hispanic or Latino

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

723

214(181, 254)

Not Hispanic or Latino

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

208

41958(29839, 59000)

Not Hispanic or Latino

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

208

39610(29152, 53820)

Not Hispanic or Latino

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

208

81834(63759, 105035)

Not Hispanic or Latino

Day 29

Vaccine

Positive

Live virus-nAb MN50

208

195(148, 257)

Not Hispanic or Latino

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

208

179(131, 246)

Not Hispanic or Latino

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

208

337(240, 473)

Not Hispanic or Latino

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

119

10(10, 10)

Not Hispanic or Latino

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

119

10(10, 10)

Not Hispanic or Latino

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

119

10(10, 10)

Not Hispanic or Latino

Day 29

Placebo

Negative

Live virus-nAb MN50

119

31(31, 31)

Not Hispanic or Latino

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

119

5(5, 5)

Not Hispanic or Latino

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

119

5(5, 6)

Not Hispanic or Latino

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

198

12616(9255, 17197)

Not Hispanic or Latino

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

198

12153(9187, 16078)

Not Hispanic or Latino

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

198

18891(15084, 23659)

Not Hispanic or Latino

Day 29

Placebo

Positive

Live virus-nAb MN50

198

94(72, 122)

Not Hispanic or Latino

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

198

52(38, 69)

Not Hispanic or Latino

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

198

148(105, 210)

Not Hispanic or Latino

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

723

394932(324377, 480834)

Not Hispanic or Latino

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

723

1095375(939605, 1276970)

Not Hispanic or Latino

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

723

2286047(2004495, 2607145)

Not Hispanic or Latino

Day 57

Vaccine

Negative

Live virus-nAb MN50

723

1517(1264, 1820)

Not Hispanic or Latino

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

723

1811(1469, 2233)

Not Hispanic or Latino

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

723

3149(2585, 3836)

Not Hispanic or Latino

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

208

852459(581610, 1249440)

Not Hispanic or Latino

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

208

2596583(1969141, 3423951)

Not Hispanic or Latino

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

208

5437290(4395135, 6726555)

Not Hispanic or Latino

Day 57

Vaccine

Positive

Live virus-nAb MN50

208

4027(3047, 5323)

Not Hispanic or Latino

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

208

4552(3211, 6453)

Not Hispanic or Latino

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

208

7701(5217, 11368)

Not Hispanic or Latino

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

119

10(10, 10)

Not Hispanic or Latino

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

119

10(10, 10)

Not Hispanic or Latino

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

119

10(10, 10)

Not Hispanic or Latino

Day 57

Placebo

Negative

Live virus-nAb MN50

119

31(31, 31)

Not Hispanic or Latino

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

119

5(5, 5)

Not Hispanic or Latino

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

119

5(5, 5)

Not Hispanic or Latino

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

198

179380(122975, 261655)

Not Hispanic or Latino

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

198

495267(355781, 689438)

Not Hispanic or Latino

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

198

705202(543308, 915337)

Not Hispanic or Latino

Day 57

Placebo

Positive

Live virus-nAb MN50

198

676(475, 960)

Not Hispanic or Latino

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

198

590(389, 894)

Not Hispanic or Latino

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

198

2116(1483, 3019)

Not reported and unknown

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

69

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

69

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

69

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Negative

Live virus-nAb MN50

69

31(31, 31)

Not reported and unknown

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

69

5(5, 5)

Not reported and unknown

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

69

5(5, 5)

Not reported and unknown

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

27

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

27

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

27

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Positive

Live virus-nAb MN50

27

31(31, 31)

Not reported and unknown

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

27

5(5, 5)

Not reported and unknown

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

27

5(5, 5)

Not reported and unknown

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 1

Placebo

Negative

Live virus-nAb MN50

16

31(31, 31)

Not reported and unknown

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

16

5(5, 5)

Not reported and unknown

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

16

6(5, 8)

Not reported and unknown

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

27

10(10, 10)

Not reported and unknown

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

27

10(10, 10)

Not reported and unknown

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

27

10(10, 10)

Not reported and unknown

Day 1

Placebo

Positive

Live virus-nAb MN50

27

31(31, 31)

Not reported and unknown

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

27

5(5, 5)

Not reported and unknown

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

27

5(5, 5)

Not reported and unknown

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

69

34658(19186, 62605)

Not reported and unknown

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

69

22176(11878, 41401)

Not reported and unknown

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

69

45320(27868, 73702)

Not reported and unknown

Day 29

Vaccine

Negative

Live virus-nAb MN50

69

158(94, 265)

Not reported and unknown

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

69

134(73, 246)

Not reported and unknown

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

69

338(183, 623)

Not reported and unknown

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

27

20686(6988, 61228)

Not reported and unknown

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

27

35351(13700, 91220)

Not reported and unknown

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

27

66488(32772, 134894)

Not reported and unknown

Day 29

Vaccine

Positive

Live virus-nAb MN50

27

251(91, 691)

Not reported and unknown

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

27

114(44, 291)

Not reported and unknown

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

27

325(171, 618)

Not reported and unknown

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 29

Placebo

Negative

Live virus-nAb MN50

16

31(31, 31)

Not reported and unknown

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

16

5(5, 5)

Not reported and unknown

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

16

5(5, 5)

Not reported and unknown

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

27

7772(4079, 14808)

Not reported and unknown

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

27

8558(4244, 17258)

Not reported and unknown

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

27

10833(6651, 17645)

Not reported and unknown

Day 29

Placebo

Positive

Live virus-nAb MN50

27

75(50, 112)

Not reported and unknown

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

27

43(22, 84)

Not reported and unknown

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

27

175(112, 273)

Not reported and unknown

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

69

597128(295020, 1208602)

Not reported and unknown

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

69

1092114(647550, 1841889)

Not reported and unknown

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

69

3502950(2226723, 5510633)

Not reported and unknown

Day 57

Vaccine

Negative

Live virus-nAb MN50

69

1275(666, 2440)

Not reported and unknown

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

69

1432(816, 2511)

Not reported and unknown

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

69

2063(1034, 4116)

Not reported and unknown

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

27

619511(172443, 2225627)

Not reported and unknown

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

27

1692544(915839, 3127957)

Not reported and unknown

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

27

6969464(3826723, 12693217)

Not reported and unknown

Day 57

Vaccine

Positive

Live virus-nAb MN50

27

3795(2170, 6636)

Not reported and unknown

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

27

4420(597, 32740)

Not reported and unknown

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

27

8420(1347, 52622)

Not reported and unknown

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 57

Placebo

Negative

Live virus-nAb MN50

16

31(31, 31)

Not reported and unknown

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

16

5(5, 5)

Not reported and unknown

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

16

5(5, 5)

Not reported and unknown

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

27

70375(24874, 199106)

Not reported and unknown

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

27

292258(179012, 477144)

Not reported and unknown

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

27

783961(452126, 1359342)

Not reported and unknown

Day 57

Placebo

Positive

Live virus-nAb MN50

27

245(127, 475)

Not reported and unknown

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

27

176(48, 641)

Not reported and unknown

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

27

461(203, 1046)

Table 5h. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Race

Group

Visit

Arm

Baseline COVID

Marker

N

GMT/GMC

Race

Not reported and unknown

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

82

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

82

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

82

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Negative

Live virus-nAb MN50

82

31(31, 31)

Not reported and unknown

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

82

5(5, 5)

Not reported and unknown

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

82

5(5, 5)

Not reported and unknown

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

29

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

29

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

29

10(10, 10)

Not reported and unknown

Day 1

Vaccine

Positive

Live virus-nAb MN50

29

31(31, 31)

Not reported and unknown

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

29

5(5, 5)

Not reported and unknown

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

29

5(5, 5)

Not reported and unknown

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 1

Placebo

Negative

Live virus-nAb MN50

16

31(31, 31)

Not reported and unknown

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

16

5(5, 5)

Not reported and unknown

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

16

5(5, 5)

Not reported and unknown

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

19

10(10, 10)

Not reported and unknown

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

19

10(10, 10)

Not reported and unknown

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

19

10(10, 10)

Not reported and unknown

Day 1

Placebo

Positive

Live virus-nAb MN50

19

31(31, 31)

Not reported and unknown

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

19

5(5, 5)

Not reported and unknown

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

19

5(5, 5)

Not reported and unknown

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

82

24610(15149, 39981)

Not reported and unknown

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

82

22547(15267, 33299)

Not reported and unknown

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

82

51778(36398, 73657)

Not reported and unknown

Day 29

Vaccine

Negative

Live virus-nAb MN50

82

158(99, 250)

Not reported and unknown

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

82

97(58, 160)

Not reported and unknown

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

82

243(137, 430)

Not reported and unknown

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

29

75957(23758, 242847)

Not reported and unknown

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

29

44054(21318, 91038)

Not reported and unknown

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

29

120107(62445, 231015)

Not reported and unknown

Day 29

Vaccine

Positive

Live virus-nAb MN50

29

298(101, 878)

Not reported and unknown

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

29

252(84, 758)

Not reported and unknown

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

29

604(185, 1970)

Not reported and unknown

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 29

Placebo

Negative

Live virus-nAb MN50

16

31(31, 31)

Not reported and unknown

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

16

5(5, 5)

Not reported and unknown

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

16

5(5, 5)

Not reported and unknown

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

19

10622(4164, 27094)

Not reported and unknown

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

19

13429(6000, 30056)

Not reported and unknown

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

19

16476(9120, 29764)

Not reported and unknown

Day 29

Placebo

Positive

Live virus-nAb MN50

19

86(38, 193)

Not reported and unknown

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

19

42(15, 113)

Not reported and unknown

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

19

116(47, 290)

Not reported and unknown

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

82

387128(206168, 726921)

Not reported and unknown

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

82

1167497(716317, 1902856)

Not reported and unknown

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

82

1960249(1372043, 2800623)

Not reported and unknown

Day 57

Vaccine

Negative

Live virus-nAb MN50

82

1799(1041, 3109)

Not reported and unknown

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

82

2208(1195, 4078)

Not reported and unknown

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

82

3960(2197, 7137)

Not reported and unknown

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

29

980068(328589, 2923205)

Not reported and unknown

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

29

3822630(2163704, 6753466)

Not reported and unknown

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

29

6278608(4069304, 9687386)

Not reported and unknown

Day 57

Vaccine

Positive

Live virus-nAb MN50

29

3409(1667, 6972)

Not reported and unknown

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

29

6522(2727, 15595)

Not reported and unknown

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

29

4981(1359, 18256)

Not reported and unknown

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

16

10(10, 10)

Not reported and unknown

Day 57

Placebo

Negative

Live virus-nAb MN50

16

31(31, 31)

Not reported and unknown

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

16

5(5, 5)

Not reported and unknown

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

16

5(5, 5)

Not reported and unknown

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

19

305832(116917, 799995)

Not reported and unknown

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

19

429224(135857, 1356088)

Not reported and unknown

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

19

596294(284192, 1251148)

Not reported and unknown

Day 57

Placebo

Positive

Live virus-nAb MN50

19

568(274, 1179)

Not reported and unknown

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

19

1251(432, 3620)

Not reported and unknown

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

19

1457(397, 5346)

American Indian or Alaska Native

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

23

10(10, 10)

American Indian or Alaska Native

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

23

10(10, 10)

American Indian or Alaska Native

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

23

10(10, 10)

American Indian or Alaska Native

Day 1

Vaccine

Negative

Live virus-nAb MN50

23

31(31, 31)

American Indian or Alaska Native

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

23

5(5, 5)

American Indian or Alaska Native

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

23

5(5, 5)

American Indian or Alaska Native

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

8

10(10, 10)

American Indian or Alaska Native

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

8

10(10, 10)

American Indian or Alaska Native

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

8

10(10, 10)

American Indian or Alaska Native

Day 1

Vaccine

Positive

Live virus-nAb MN50

8

31(31, 31)

American Indian or Alaska Native

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

8

5(5, 5)

American Indian or Alaska Native

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

8

5(5, 5)

American Indian or Alaska Native

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

4

10(10, 10)

American Indian or Alaska Native

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

4

10(10, 10)

American Indian or Alaska Native

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

4

10(10, 10)

American Indian or Alaska Native

Day 1

Placebo

Negative

Live virus-nAb MN50

4

31(31, 31)

American Indian or Alaska Native

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

4

5(5, 5)

American Indian or Alaska Native

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

4

5(5, 5)

American Indian or Alaska Native

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

9

10(10, 10)

American Indian or Alaska Native

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

9

10(10, 10)

American Indian or Alaska Native

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

9

10(10, 10)

American Indian or Alaska Native

Day 1

Placebo

Positive

Live virus-nAb MN50

9

31(31, 31)

American Indian or Alaska Native

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

9

5(5, 5)

American Indian or Alaska Native

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

9

5(5, 5)

American Indian or Alaska Native

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

23

15408(4857, 48884)

American Indian or Alaska Native

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

23

14839(5964, 36923)

American Indian or Alaska Native

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

23

44194(23071, 84657)

American Indian or Alaska Native

Day 29

Vaccine

Negative

Live virus-nAb MN50

23

90(51, 159)

American Indian or Alaska Native

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

23

99(32, 304)

American Indian or Alaska Native

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

23

154(59, 403)

American Indian or Alaska Native

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

8

78224(55105, 111043)

American Indian or Alaska Native

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

8

58608(16589, 207061)

American Indian or Alaska Native

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

8

107648(28095, 412463)

American Indian or Alaska Native

Day 29

Vaccine

Positive

Live virus-nAb MN50

8

202(109, 375)

American Indian or Alaska Native

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

8

174(61, 501)

American Indian or Alaska Native

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

8

236(105, 532)

American Indian or Alaska Native

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

4

10(10, 10)

American Indian or Alaska Native

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

4

10(10, 10)

American Indian or Alaska Native

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

4

10(10, 10)

American Indian or Alaska Native

Day 29

Placebo

Negative

Live virus-nAb MN50

4

31(31, 31)

American Indian or Alaska Native

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

4

5(5, 5)

American Indian or Alaska Native

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

4

5(5, 5)

American Indian or Alaska Native

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

9

12456(5794, 26780)

American Indian or Alaska Native

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

9

46485(22855, 94544)

American Indian or Alaska Native

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

9

37459(16293, 86119)

American Indian or Alaska Native

Day 29

Placebo

Positive

Live virus-nAb MN50

9

103(37, 288)

American Indian or Alaska Native

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

9

60(25, 144)

American Indian or Alaska Native

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

9

220(76, 632)

American Indian or Alaska Native

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

23

269388(132372, 548224)

American Indian or Alaska Native

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

23

861285(401178, 1849081)

American Indian or Alaska Native

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

23

1815698(747717, 4409102)

American Indian or Alaska Native

Day 57

Vaccine

Negative

Live virus-nAb MN50

23

1811(811, 4044)

American Indian or Alaska Native

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

23

3102(640, 15045)

American Indian or Alaska Native

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

23

2868(1187, 6929)

American Indian or Alaska Native

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

8

2756615(1542509, 4926340)

American Indian or Alaska Native

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

8

2032105(811229, 5090361)

American Indian or Alaska Native

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

8

8967133(5231738, 15369551)

American Indian or Alaska Native

Day 57

Vaccine

Positive

Live virus-nAb MN50

8

4607(1730, 12270)

American Indian or Alaska Native

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

8

3665(1344, 9992)

American Indian or Alaska Native

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

8

8346(2020, 34489)

American Indian or Alaska Native

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

4

10(10, 10)

American Indian or Alaska Native

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

4

10(10, 10)

American Indian or Alaska Native

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

4

10(10, 10)

American Indian or Alaska Native

Day 57

Placebo

Negative

Live virus-nAb MN50

4

31(31, 31)

American Indian or Alaska Native

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

4

5(5, 5)

American Indian or Alaska Native

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

4

5(5, 5)

American Indian or Alaska Native

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

9

547461(240136, 1248096)

American Indian or Alaska Native

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

9

856369(277258, 2645067)

American Indian or Alaska Native

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

9

2644241(1400124, 4993848)

American Indian or Alaska Native

Day 57

Placebo

Positive

Live virus-nAb MN50

9

845(187, 3813)

American Indian or Alaska Native

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

9

2177(380, 12461)

American Indian or Alaska Native

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

9

2973(621, 14241)

Asian

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

72

10(10, 10)

Asian

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

72

10(10, 10)

Asian

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

72

10(10, 10)

Asian

Day 1

Vaccine

Negative

Live virus-nAb MN50

72

31(31, 31)

Asian

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

72

5(5, 6)

Asian

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

72

5(5, 5)

Asian

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

24

10(10, 10)

Asian

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

24

10(10, 10)

Asian

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

24

10(10, 10)

Asian

Day 1

Vaccine

Positive

Live virus-nAb MN50

24

31(31, 31)

Asian

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

24

5(5, 5)

Asian

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

24

5(5, 5)

Asian

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

Asian

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

Asian

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

Asian

Day 1

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

Asian

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 5)

Asian

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

11

6(4, 9)

Asian

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

22

10(10, 10)

Asian

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

22

10(10, 10)

Asian

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

22

10(10, 10)

Asian

Day 1

Placebo

Positive

Live virus-nAb MN50

22

31(31, 31)

Asian

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

22

5(5, 5)

Asian

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

22

5(5, 5)

Asian

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

72

29058(15721, 53708)

Asian

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

72

22450(13872, 36333)

Asian

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

72

39381(27210, 56994)

Asian

Day 29

Vaccine

Negative

Live virus-nAb MN50

72

152(96, 240)

Asian

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

72

122(76, 198)

Asian

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

72

256(166, 395)

Asian

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

24

16585(8330, 33019)

Asian

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

24

14666(7029, 30602)

Asian

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

24

53491(32372, 88389)

Asian

Day 29

Vaccine

Positive

Live virus-nAb MN50

24

129(69, 244)

Asian

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

24

85(40, 181)

Asian

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

24

179(82, 390)

Asian

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

Asian

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

Asian

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

Asian

Day 29

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

Asian

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 5)

Asian

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

11

5(5, 5)

Asian

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

22

11667(5557, 24498)

Asian

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

22

11101(5005, 24621)

Asian

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

22

26745(13630, 52477)

Asian

Day 29

Placebo

Positive

Live virus-nAb MN50

22

110(70, 173)

Asian

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

22

62(32, 120)

Asian

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

22

121(55, 263)

Asian

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

72

307565(168372, 561829)

Asian

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

72

617613(396254, 962628)

Asian

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

72

2147277(1387913, 3322108)

Asian

Day 57

Vaccine

Negative

Live virus-nAb MN50

72

1291(832, 2005)

Asian

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

72

3063(1452, 6462)

Asian

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

72

2894(1728, 4846)

Asian

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

24

325313(148009, 715011)

Asian

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

24

943716(450508, 1976875)

Asian

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

24

3260154(1620445, 6559065)

Asian

Day 57

Vaccine

Positive

Live virus-nAb MN50

24

980(435, 2206)

Asian

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

24

2875(1184, 6978)

Asian

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

24

2370(966, 5815)

Asian

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

Asian

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

Asian

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

Asian

Day 57

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

Asian

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 5)

Asian

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

11

5(5, 5)

Asian

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

22

145809(38658, 549949)

Asian

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

22

316157(113382, 881584)

Asian

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

22

923976(318284, 2682299)

Asian

Day 57

Placebo

Positive

Live virus-nAb MN50

22

981(274, 3519)

Asian

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

22

688(248, 1912)

Asian

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

22

2529(953, 6713)

Black or African American

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

186

10(10, 10)

Black or African American

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

186

10(10, 10)

Black or African American

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

186

10(10, 10)

Black or African American

Day 1

Vaccine

Negative

Live virus-nAb MN50

186

31(31, 31)

Black or African American

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

186

5(5, 5)

Black or African American

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

186

5(5, 5)

Black or African American

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

37

10(10, 10)

Black or African American

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

37

10(10, 10)

Black or African American

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

37

10(10, 10)

Black or African American

Day 1

Vaccine

Positive

Live virus-nAb MN50

37

31(31, 31)

Black or African American

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

37

5(5, 5)

Black or African American

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

37

5(5, 5)

Black or African American

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

Black or African American

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

Black or African American

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

Black or African American

Day 1

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

Black or African American

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

Black or African American

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

Black or African American

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

54

10(10, 10)

Black or African American

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

54

10(10, 10)

Black or African American

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

54

10(10, 10)

Black or African American

Day 1

Placebo

Positive

Live virus-nAb MN50

54

31(31, 31)

Black or African American

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

54

5(5, 6)

Black or African American

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

54

5(5, 5)

Black or African American

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

186

18990(12929, 27893)

Black or African American

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

186

21364(15843, 28809)

Black or African American

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

186

37502(28190, 49890)

Black or African American

Day 29

Vaccine

Negative

Live virus-nAb MN50

186

127(94, 170)

Black or African American

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

186

92(63, 136)

Black or African American

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

186

179(125, 258)

Black or African American

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

37

51767(20122, 133180)

Black or African American

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

37

54759(28695, 104499)

Black or African American

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

37

73291(52215, 102875)

Black or African American

Day 29

Vaccine

Positive

Live virus-nAb MN50

37

246(117, 516)

Black or African American

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

37

201(81, 499)

Black or African American

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

37

453(214, 958)

Black or African American

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

Black or African American

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

Black or African American

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

Black or African American

Day 29

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

Black or African American

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

Black or African American

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

Black or African American

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

54

9552(5420, 16835)

Black or African American

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

54

11200(6788, 18481)

Black or African American

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

54

13590(8763, 21075)

Black or African American

Day 29

Placebo

Positive

Live virus-nAb MN50

54

92(64, 133)

Black or African American

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

54

43(25, 73)

Black or African American

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

54

130(79, 213)

Black or African American

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

186

283002(180902, 442728)

Black or African American

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

186

995774(693820, 1429141)

Black or African American

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

186

2062946(1559082, 2729650)

Black or African American

Day 57

Vaccine

Negative

Live virus-nAb MN50

186

1227(833, 1808)

Black or African American

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

186

1431(861, 2379)

Black or African American

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

186

2295(1526, 3452)

Black or African American

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

37

822664(316585, 2137736)

Black or African American

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

37

2748160(1372832, 5501318)

Black or African American

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

37

5781344(3814342, 8762699)

Black or African American

Day 57

Vaccine

Positive

Live virus-nAb MN50

37

4962(2890, 8519)

Black or African American

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

37

7120(2965, 17098)

Black or African American

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

37

6766(2257, 20287)

Black or African American

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

Black or African American

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

Black or African American

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

Black or African American

Day 57

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

Black or African American

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

Black or African American

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

Black or African American

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

54

177236(97660, 321654)

Black or African American

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

54

432189(275879, 677063)

Black or African American

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

54

538343(309150, 937450)

Black or African American

Day 57

Placebo

Positive

Live virus-nAb MN50

54

656(334, 1288)

Black or African American

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

54

499(255, 976)

Black or African American

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

54

1783(970, 3278)

Multiracial

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

50

10(10, 10)

Multiracial

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

50

10(10, 10)

Multiracial

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

50

10(10, 10)

Multiracial

Day 1

Vaccine

Negative

Live virus-nAb MN50

50

31(31, 31)

Multiracial

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

50

5(5, 5)

Multiracial

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

50

5(5, 6)

Multiracial

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

16

10(10, 10)

Multiracial

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

16

10(10, 10)

Multiracial

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

16

10(10, 10)

Multiracial

Day 1

Vaccine

Positive

Live virus-nAb MN50

16

31(31, 31)

Multiracial

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

16

5(5, 6)

Multiracial

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

16

5(5, 5)

Multiracial

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 1

Placebo

Negative

Live virus-nAb MN50

12

31(31, 31)

Multiracial

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

12

5(5, 5)

Multiracial

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

12

5(5, 5)

Multiracial

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 1

Placebo

Positive

Live virus-nAb MN50

12

31(31, 31)

Multiracial

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

12

5(5, 5)

Multiracial

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

12

5(5, 5)

Multiracial

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

50

15030(7688, 29387)

Multiracial

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

50

16146(8126, 32079)

Multiracial

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

50

35276(22869, 54413)

Multiracial

Day 29

Vaccine

Negative

Live virus-nAb MN50

50

150(77, 290)

Multiracial

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

50

64(34, 122)

Multiracial

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

50

219(102, 470)

Multiracial

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

16

51133(20521, 127407)

Multiracial

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

16

58635(23706, 145028)

Multiracial

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

16

88368(51569, 151425)

Multiracial

Day 29

Vaccine

Positive

Live virus-nAb MN50

16

462(158, 1353)

Multiracial

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

16

186(87, 399)

Multiracial

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

16

598(283, 1263)

Multiracial

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 29

Placebo

Negative

Live virus-nAb MN50

12

31(31, 31)

Multiracial

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

12

5(5, 5)

Multiracial

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

12

5(5, 5)

Multiracial

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

12

31749(8579, 117498)

Multiracial

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

12

19083(4166, 87413)

Multiracial

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

12

19160(9716, 37784)

Multiracial

Day 29

Placebo

Positive

Live virus-nAb MN50

12

64(40, 102)

Multiracial

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

12

97(22, 436)

Multiracial

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

12

160(55, 471)

Multiracial

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

50

466712(202077, 1077906)

Multiracial

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

50

818122(421874, 1586549)

Multiracial

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

50

2097967(1343390, 3276386)

Multiracial

Day 57

Vaccine

Negative

Live virus-nAb MN50

50

924(500, 1707)

Multiracial

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

50

1471(701, 3087)

Multiracial

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

50

1290(765, 2177)

Multiracial

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

16

1668847(377763, 7372483)

Multiracial

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

16

6098484(3170420, 11730783)

Multiracial

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

16

5861262(2842505, 12085955)

Multiracial

Day 57

Vaccine

Positive

Live virus-nAb MN50

16

4476(1899, 10550)

Multiracial

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

16

5842(1516, 22508)

Multiracial

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

16

16918(4545, 62976)

Multiracial

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

12

10(10, 10)

Multiracial

Day 57

Placebo

Negative

Live virus-nAb MN50

12

31(31, 31)

Multiracial

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

12

5(5, 5)

Multiracial

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

12

5(5, 5)

Multiracial

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

12

153873(50478, 469057)

Multiracial

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

12

540021(236744, 1231804)

Multiracial

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

12

1133211(286887, 4476208)

Multiracial

Day 57

Placebo

Positive

Live virus-nAb MN50

12

739(129, 4243)

Multiracial

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

12

359(93, 1385)

Multiracial

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

12

2683(1220, 5899)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

17

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

17

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

17

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Negative

Live virus-nAb MN50

17

31(31, 31)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

17

5(5, 6)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

17

6(4, 7)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Positive

Live virus-nAb MN50

3

31(31, 31)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

3

5(5, 5)

Native Hawaiian or Other Pacific Islander

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

3

5(5, 5)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Negative

Live virus-nAb MN50

3

31(31, 31)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

3

5(5, 5)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

3

5(5, 5)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

4

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

4

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

4

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Positive

Live virus-nAb MN50

4

31(31, 31)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

4

5(5, 5)

Native Hawaiian or Other Pacific Islander

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

4

5(5, 5)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

17

30469(9953, 93276)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

17

38260(24141, 60638)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

17

63341(31507, 127339)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Negative

Live virus-nAb MN50

17

308(104, 915)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

17

101(25, 405)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

17

536(164, 1746)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

3

47152(7608, 292233)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

3

102274(37430, 279459)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

3

231295(106772, 501046)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Positive

Live virus-nAb MN50

3

350(303, 405)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

3

245(59, 1025)

Native Hawaiian or Other Pacific Islander

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

3

485(114, 2062)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Negative

Live virus-nAb MN50

3

31(31, 31)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

3

5(5, 5)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

3

5(5, 5)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

4

13410(4087, 44002)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

4

22863(14278, 36611)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

4

42403(13314, 135042)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Positive

Live virus-nAb MN50

4

154(49, 480)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

4

81(42, 157)

Native Hawaiian or Other Pacific Islander

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

4

358(127, 1009)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

17

562315(172087, 1837426)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

17

1192658(305252, 4659863)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

17

3313635(1463742, 7501441)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Negative

Live virus-nAb MN50

17

3353(981, 11462)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

17

2324(888, 6084)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

17

6669(2102, 21157)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

3

3863077(1998544, 7467116)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

3

11446840(6255217, 20947338)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

3

16830792(13086759, 21645968)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Positive

Live virus-nAb MN50

3

18976(18976, 18976)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

3

12770(2673, 61015)

Native Hawaiian or Other Pacific Islander

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

3

94973(2487, 3627015)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

3

10(10, 10)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Negative

Live virus-nAb MN50

3

31(31, 31)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

3

5(5, 5)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

3

5(5, 5)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

4

332587(138891, 796412)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

4

972260(275170, 3435298)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

4

975463(556759, 1709049)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Positive

Live virus-nAb MN50

4

1887(474, 7505)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

4

370(60, 2284)

Native Hawaiian or Other Pacific Islander

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

4

13837(3685, 51953)

Other

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

26

10(10, 10)

Other

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

26

10(10, 10)

Other

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

26

10(10, 10)

Other

Day 1

Vaccine

Negative

Live virus-nAb MN50

26

31(31, 31)

Other

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

26

5(5, 5)

Other

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

26

6(4, 8)

Other

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

12

10(10, 10)

Other

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

12

10(10, 10)

Other

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

12

10(10, 10)

Other

Day 1

Vaccine

Positive

Live virus-nAb MN50

12

31(31, 31)

Other

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

12

5(5, 6)

Other

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

12

5(5, 5)

Other

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

2

10(10, 10)

Other

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

2

10(10, 10)

Other

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

2

10(10, 10)

Other

Day 1

Placebo

Negative

Live virus-nAb MN50

2

31(31, 31)

Other

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

2

5(5, 5)

Other

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

2

5(5, 5)

Other

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

12

10(10, 10)

Other

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

12

10(10, 10)

Other

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

12

10(10, 10)

Other

Day 1

Placebo

Positive

Live virus-nAb MN50

12

31(31, 31)

Other

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

12

5(5, 5)

Other

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

12

5(5, 5)

Other

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

26

28296(9834, 81416)

Other

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

26

26949(14741, 49270)

Other

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

26

39026(17100, 89070)

Other

Day 29

Vaccine

Negative

Live virus-nAb MN50

26

109(66, 179)

Other

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

26

126(55, 287)

Other

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

26

142(73, 275)

Other

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

12

41080(14172, 119079)

Other

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

12

39608(19506, 80427)

Other

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

12

102304(42388, 246909)

Other

Day 29

Vaccine

Positive

Live virus-nAb MN50

12

241(87, 666)

Other

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

12

297(119, 741)

Other

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

12

278(87, 886)

Other

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

2

10(10, 10)

Other

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

2

10(10, 10)

Other

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

2

10(10, 10)

Other

Day 29

Placebo

Negative

Live virus-nAb MN50

2

31(31, 31)

Other

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

2

5(5, 5)

Other

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

2

5(5, 5)

Other

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

12

6988(2755, 17724)

Other

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

12

7530(5472, 10361)

Other

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

12

18056(11387, 28630)

Other

Day 29

Placebo

Positive

Live virus-nAb MN50

12

39(32, 48)

Other

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

12

28(14, 60)

Other

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

12

84(57, 123)

Other

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

26

222896(56894, 873241)

Other

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

26

922733(412448, 2064349)

Other

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

26

2362094(1084064, 5146827)

Other

Day 57

Vaccine

Negative

Live virus-nAb MN50

26

965(329, 2829)

Other

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

26

1949(729, 5208)

Other

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

26

1463(403, 5306)

Other

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

12

1419149(662337, 3040723)

Other

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

12

2943125(745091, 11625406)

Other

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

12

13044151(8052613, 21129769)

Other

Day 57

Vaccine

Positive

Live virus-nAb MN50

12

1760(593, 5226)

Other

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

12

5827(822, 41320)

Other

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

12

7156(1634, 31335)

Other

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

2

10(10, 10)

Other

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

2

10(10, 10)

Other

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

2

10(10, 10)

Other

Day 57

Placebo

Negative

Live virus-nAb MN50

2

31(31, 31)

Other

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

2

5(5, 5)

Other

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

2

5(5, 5)

Other

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

12

59690(18433, 193287)

Other

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

12

207584(111282, 387222)

Other

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

12

340502(260014, 445904)

Other

Day 57

Placebo

Positive

Live virus-nAb MN50

12

194(70, 540)

Other

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

12

603(308, 1178)

Other

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

12

1085(314, 3755)

White

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

59

10(10, 10)

White

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

59

10(10, 10)

White

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

59

10(10, 10)

White

Day 1

Vaccine

Negative

Live virus-nAb MN50

59

31(31, 31)

White

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

59

5(5, 5)

White

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

59

5(5, 5)

White

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

32

10(10, 10)

White

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

32

10(10, 10)

White

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

32

10(10, 10)

White

Day 1

Vaccine

Positive

Live virus-nAb MN50

32

31(31, 31)

White

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

32

5(5, 5)

White

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

32

5(5, 5)

White

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

White

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

White

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

White

Day 1

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

White

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 6)

White

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

11

6(4, 8)

White

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

26

10(10, 10)

White

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

26

10(10, 10)

White

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

26

10(10, 10)

White

Day 1

Placebo

Positive

Live virus-nAb MN50

26

31(31, 31)

White

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

26

5(5, 5)

White

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

26

5(5, 5)

White

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

59

25696(11780, 56051)

White

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

59

19942(10087, 39425)

White

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

59

47044(26121, 84723)

White

Day 29

Vaccine

Negative

Live virus-nAb MN50

59

133(80, 220)

White

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

59

114(52, 252)

White

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

59

267(127, 564)

White

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

32

29340(10943, 78668)

White

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

32

47326(20981, 106754)

White

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

32

76222(39211, 148169)

White

Day 29

Vaccine

Positive

Live virus-nAb MN50

32

266(107, 661)

White

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

32

175(74, 413)

White

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

32

340(186, 620)

White

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

White

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

White

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

White

Day 29

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

White

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 5)

White

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

11

5(5, 5)

White

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

26

11849(5587, 25128)

White

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

26

12774(5960, 27377)

White

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

26

13775(8423, 22529)

White

Day 29

Placebo

Positive

Live virus-nAb MN50

26

79(51, 122)

White

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

26

55(26, 117)

White

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

26

182(104, 320)

White

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

59

492496(213175, 1137805)

White

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

59

1134725(649066, 1983774)

White

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

59

3250587(1889432, 5592323)

White

Day 57

Vaccine

Negative

Live virus-nAb MN50

59

1519(745, 3096)

White

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

59

1224(558, 2685)

White

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

59

1726(789, 3776)

White

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

32

702713(216498, 2280880)

White

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

32

2806043(1453188, 5418350)

White

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

32

8115051(4823866, 13651717)

White

Day 57

Vaccine

Positive

Live virus-nAb MN50

32

3885(1946, 7755)

White

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

32

5741(940, 35063)

White

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

32

9928(1885, 52288)

White

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

White

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

White

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

White

Day 57

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

White

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 5)

White

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

11

5(5, 5)

White

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

26

60956(21486, 172927)

White

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

26

424862(250810, 719699)

White

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

26

904138(526835, 1551652)

White

Day 57

Placebo

Positive

Live virus-nAb MN50

26

341(194, 597)

White

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

26

161(50, 519)

White

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

26

569(221, 1465)

White Non-Hispanic

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

389

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Negative

Live virus-nAb MN50

389

31(31, 31)

White Non-Hispanic

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

389

5(5, 5)

White Non-Hispanic

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

389

5(5, 5)

White Non-Hispanic

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Positive

Live virus-nAb MN50

112

31(31, 31)

White Non-Hispanic

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

White Non-Hispanic

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

White Non-Hispanic

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Negative

Live virus-nAb MN50

66

31(31, 31)

White Non-Hispanic

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

66

5(5, 5)

White Non-Hispanic

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

66

5(5, 5)

White Non-Hispanic

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Positive

Live virus-nAb MN50

112

31(31, 31)

White Non-Hispanic

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

White Non-Hispanic

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

White Non-Hispanic

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

389

26265(21332, 32338)

White Non-Hispanic

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

28266(23127, 34547)

White Non-Hispanic

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

49851(42322, 58718)

White Non-Hispanic

Day 29

Vaccine

Negative

Live virus-nAb MN50

389

159(132, 191)

White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

389

114(93, 140)

White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

389

215(173, 266)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

112

35869(23611, 54493)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

38777(25716, 58473)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

76818(53914, 109452)

White Non-Hispanic

Day 29

Vaccine

Positive

Live virus-nAb MN50

112

172(123, 241)

White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

112

162(109, 241)

White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

112

300(192, 467)

White Non-Hispanic

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 29

Placebo

Negative

Live virus-nAb MN50

66

31(31, 31)

White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

66

5(5, 5)

White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

66

5(5, 6)

White Non-Hispanic

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

112

13290(8770, 20139)

White Non-Hispanic

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

112

11123(7688, 16091)

White Non-Hispanic

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

112

19291(14336, 25958)

White Non-Hispanic

Day 29

Placebo

Positive

Live virus-nAb MN50

112

93(65, 133)

White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

112

52(35, 78)

White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

112

163(100, 265)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

389

456661(352451, 591684)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

1176305(967228, 1430578)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

2475664(2085297, 2939107)

White Non-Hispanic

Day 57

Vaccine

Negative

Live virus-nAb MN50

389

1521(1191, 1943)

White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

389

1766(1369, 2279)

White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

389

3292(2526, 4290)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

112

837677(501685, 1398693)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

2618440(1810493, 3786941)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

5117900(3826248, 6845583)

White Non-Hispanic

Day 57

Vaccine

Positive

Live virus-nAb MN50

112

4697(3331, 6625)

White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

112

4043(2544, 6427)

White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

112

9026(5558, 14656)

White Non-Hispanic

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 57

Placebo

Negative

Live virus-nAb MN50

66

31(31, 31)

White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

66

5(5, 6)

White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

66

5(5, 5)

White Non-Hispanic

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

112

156472(94794, 258283)

White Non-Hispanic

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

112

516772(332400, 803410)

White Non-Hispanic

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

112

735886(529644, 1022438)

White Non-Hispanic

Day 57

Placebo

Positive

Live virus-nAb MN50

112

646(402, 1039)

White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

112

549(308, 976)

White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

112

2012(1253, 3231)

Table 5i. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Race and ethnic group

Group

Visit

Arm

Baseline COVID

Marker

N

GMT/GMC

Race and ethnic group

White Non-Hispanic

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

389

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Negative

Live virus-nAb MN50

389

31(31, 31)

White Non-Hispanic

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

389

5(5, 5)

White Non-Hispanic

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

389

5(5, 5)

White Non-Hispanic

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Vaccine

Positive

Live virus-nAb MN50

112

31(31, 31)

White Non-Hispanic

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

White Non-Hispanic

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

White Non-Hispanic

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Negative

Live virus-nAb MN50

66

31(31, 31)

White Non-Hispanic

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

66

5(5, 5)

White Non-Hispanic

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

66

5(5, 5)

White Non-Hispanic

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

White Non-Hispanic

Day 1

Placebo

Positive

Live virus-nAb MN50

112

31(31, 31)

White Non-Hispanic

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

White Non-Hispanic

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

White Non-Hispanic

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

389

26265(21332, 32338)

White Non-Hispanic

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

28266(23127, 34547)

White Non-Hispanic

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

49851(42322, 58718)

White Non-Hispanic

Day 29

Vaccine

Negative

Live virus-nAb MN50

389

159(132, 191)

White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

389

114(93, 140)

White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

389

215(173, 266)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

112

35869(23611, 54493)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

38777(25716, 58473)

White Non-Hispanic

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

76818(53914, 109452)

White Non-Hispanic

Day 29

Vaccine

Positive

Live virus-nAb MN50

112

172(123, 241)

White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

112

162(109, 241)

White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

112

300(192, 467)

White Non-Hispanic

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 29

Placebo

Negative

Live virus-nAb MN50

66

31(31, 31)

White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

66

5(5, 5)

White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

66

5(5, 6)

White Non-Hispanic

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

112

13290(8770, 20139)

White Non-Hispanic

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

112

11123(7688, 16091)

White Non-Hispanic

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

112

19291(14336, 25958)

White Non-Hispanic

Day 29

Placebo

Positive

Live virus-nAb MN50

112

93(65, 133)

White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

112

52(35, 78)

White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

112

163(100, 265)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

389

456661(352451, 591684)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

1176305(967228, 1430578)

White Non-Hispanic

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

2475664(2085297, 2939107)

White Non-Hispanic

Day 57

Vaccine

Negative

Live virus-nAb MN50

389

1521(1191, 1943)

White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

389

1766(1369, 2279)

White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

389

3292(2526, 4290)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

112

837677(501685, 1398693)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

2618440(1810493, 3786941)

White Non-Hispanic

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

5117900(3826248, 6845583)

White Non-Hispanic

Day 57

Vaccine

Positive

Live virus-nAb MN50

112

4697(3331, 6625)

White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

112

4043(2544, 6427)

White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

112

9026(5558, 14656)

White Non-Hispanic

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

66

10(10, 10)

White Non-Hispanic

Day 57

Placebo

Negative

Live virus-nAb MN50

66

31(31, 31)

White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

66

5(5, 6)

White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

66

5(5, 5)

White Non-Hispanic

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

112

156472(94794, 258283)

White Non-Hispanic

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

112

516772(332400, 803410)

White Non-Hispanic

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

112

735886(529644, 1022438)

White Non-Hispanic

Day 57

Placebo

Positive

Live virus-nAb MN50

112

646(402, 1039)

White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

112

549(308, 976)

White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

112

2012(1253, 3231)

Communities of Color

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

401

10(10, 10)

Communities of Color

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

401

10(10, 10)

Communities of Color

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

401

10(10, 10)

Communities of Color

Day 1

Vaccine

Negative

Live virus-nAb MN50

401

31(31, 31)

Communities of Color

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

401

5(5, 5)

Communities of Color

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

401

5(5, 5)

Communities of Color

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

110

10(10, 10)

Communities of Color

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

110

10(10, 10)

Communities of Color

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

110

10(10, 10)

Communities of Color

Day 1

Vaccine

Positive

Live virus-nAb MN50

110

31(31, 31)

Communities of Color

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

110

5(5, 5)

Communities of Color

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

110

5(5, 5)

Communities of Color

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

65

10(10, 10)

Communities of Color

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

65

10(10, 10)

Communities of Color

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

65

10(10, 10)

Communities of Color

Day 1

Placebo

Negative

Live virus-nAb MN50

65

31(31, 31)

Communities of Color

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

65

5(5, 5)

Communities of Color

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

65

5(5, 5)

Communities of Color

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

125

10(10, 10)

Communities of Color

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

125

10(10, 10)

Communities of Color

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

125

10(10, 10)

Communities of Color

Day 1

Placebo

Positive

Live virus-nAb MN50

125

31(31, 31)

Communities of Color

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

125

5(5, 5)

Communities of Color

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

125

5(5, 5)

Communities of Color

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

401

20435(15720, 26563)

Communities of Color

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

401

21316(17355, 26183)

Communities of Color

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

401

40078(33406, 48082)

Communities of Color

Day 29

Vaccine

Negative

Live virus-nAb MN50

401

134(109, 163)

Communities of Color

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

401

94(73, 120)

Communities of Color

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

401

201(158, 256)

Communities of Color

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

110

41081(26678, 63260)

Communities of Color

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

110

41836(28084, 62323)

Communities of Color

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

110

78012(60301, 100925)

Communities of Color

Day 29

Vaccine

Positive

Live virus-nAb MN50

110

225(154, 327)

Communities of Color

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

110

180(119, 273)

Communities of Color

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

110

322(217, 476)

Communities of Color

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

65

10(10, 10)

Communities of Color

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

65

10(10, 10)

Communities of Color

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

65

10(10, 10)

Communities of Color

Day 29

Placebo

Negative

Live virus-nAb MN50

65

31(31, 31)

Communities of Color

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

65

5(5, 5)

Communities of Color

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

65

5(5, 5)

Communities of Color

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

125

12123(8528, 17232)

Communities of Color

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

125

13408(9733, 18472)

Communities of Color

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

125

19223(14987, 24655)

Communities of Color

Day 29

Placebo

Positive

Live virus-nAb MN50

125

86(69, 107)

Communities of Color

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

125

52(37, 72)

Communities of Color

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

125

136(101, 185)

Communities of Color

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

401

317210(238463, 421960)

Communities of Color

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

401

891811(709246, 1121369)

Communities of Color

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

401

2144694(1786247, 2575069)

Communities of Color

Day 57

Vaccine

Negative

Live virus-nAb MN50

401

1295(1015, 1651)

Communities of Color

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

401

1795(1297, 2483)

Communities of Color

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

401

2296(1766, 2986)

Communities of Color

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

110

937217(575113, 1527308)

Communities of Color

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

110

2656286(1746143, 4040823)

Communities of Color

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

110

6156573(4667493, 8120716)

Communities of Color

Day 57

Vaccine

Positive

Live virus-nAb MN50

110

2799(1834, 4272)

Communities of Color

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

110

5318(3282, 8614)

Communities of Color

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

110

6655(3873, 11436)

Communities of Color

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

65

10(10, 10)

Communities of Color

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

65

10(10, 10)

Communities of Color

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

65

10(10, 10)

Communities of Color

Day 57

Placebo

Negative

Live virus-nAb MN50

65

31(31, 31)

Communities of Color

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

65

5(5, 5)

Communities of Color

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

65

5(5, 5)

Communities of Color

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

125

148554(100902, 218709)

Communities of Color

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

125

440850(322338, 602935)

Communities of Color

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

125

722847(510073, 1024378)

Communities of Color

Day 57

Placebo

Positive

Live virus-nAb MN50

125

642(415, 992)

Communities of Color

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

125

564(377, 844)

Communities of Color

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

125

2027(1377, 2983)

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

114

10(10, 10)

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

114

10(10, 10)

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

114

10(10, 10)

Day 1

Vaccine

Negative

Live virus-nAb MN50

114

31(31, 31)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

114

5(5, 5)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

114

5(5, 5)

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

51

10(10, 10)

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

51

10(10, 10)

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

51

10(10, 10)

Day 1

Vaccine

Positive

Live virus-nAb MN50

51

31(31, 31)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

51

5(5, 5)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

51

5(5, 5)

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

24

10(10, 10)

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

24

10(10, 10)

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

24

10(10, 10)

Day 1

Placebo

Negative

Live virus-nAb MN50

24

31(31, 31)

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

24

5(5, 5)

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

24

5(5, 6)

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

33

10(10, 10)

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

33

10(10, 10)

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

33

10(10, 10)

Day 1

Placebo

Positive

Live virus-nAb MN50

33

31(31, 31)

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

33

5(5, 5)

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

33

5(5, 5)

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

114

26172(17056, 40160)

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

114

21338(14785, 30795)

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

114

48553(35664, 66101)

Day 29

Vaccine

Negative

Live virus-nAb MN50

114

156(107, 226)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

114

108(68, 169)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

114

265(164, 428)

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

51

43289(17390, 107761)

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

51

42022(23027, 76685)

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

51

95509(57224, 159407)

Day 29

Vaccine

Positive

Live virus-nAb MN50

51

305(144, 649)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

51

189(89, 401)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

51

495(251, 976)

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

24

10(10, 10)

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

24

10(10, 10)

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

24

10(10, 10)

Day 29

Placebo

Negative

Live virus-nAb MN50

24

31(31, 31)

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

24

5(5, 5)

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

24

5(5, 5)

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

33

9622(5090, 18190)

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

33

11523(6092, 21795)

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

33

12996(8342, 20247)

Day 29

Placebo

Positive

Live virus-nAb MN50

33

78(47, 128)

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

33

45(23, 89)

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

33

144(83, 249)

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

114

426206(251599, 721989)

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

114

1160136(785096, 1714334)

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

114

2371902(1693620, 3321829)

Day 57

Vaccine

Negative

Live virus-nAb MN50

114

1673(1063, 2634)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

114

1823(1098, 3029)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

114

3048(1819, 5107)

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

51

785539(318346, 1938368)

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

51

2898260(1760213, 4772100)

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

51

7113644(4885434, 10358125)

Day 57

Vaccine

Positive

Live virus-nAb MN50

51

4071(2490, 6657)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

51

5773(1765, 18883)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

51

7276(2190, 24176)

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

24

10(10, 10)

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

24

10(10, 10)

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

24

10(10, 10)

Day 57

Placebo

Negative

Live virus-nAb MN50

24

31(31, 31)

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

24

5(5, 5)

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

24

5(5, 5)

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

33

137408(49761, 379435)

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

33

362658(183846, 715388)

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

33

689318(416234, 1141569)

Day 57

Placebo

Positive

Live virus-nAb MN50

33

392(223, 689)

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

33

376(128, 1106)

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

33

733(294, 1828)

Table 5j. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Race and ethnic group

Group

Visit

Arm

Baseline COVID

Marker

N

GMT/GMC

Age, Race and ethnic group

Age < 65 Communities of Color

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

184

10(10, 10)

Age < 65 Communities of Color

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

184

10(10, 10)

Age < 65 Communities of Color

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

184

10(10, 10)

Age < 65 Communities of Color

Day 1

Vaccine

Negative

Live virus-nAb MN50

184

31(31, 31)

Age < 65 Communities of Color

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

184

5(5, 5)

Age < 65 Communities of Color

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

184

5(5, 5)

Age < 65 Communities of Color

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

61

10(10, 10)

Age < 65 Communities of Color

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

61

10(10, 10)

Age < 65 Communities of Color

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

61

10(10, 10)

Age < 65 Communities of Color

Day 1

Vaccine

Positive

Live virus-nAb MN50

61

31(31, 31)

Age < 65 Communities of Color

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

61

5(5, 5)

Age < 65 Communities of Color

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

61

5(5, 5)

Age < 65 Communities of Color

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

Age < 65 Communities of Color

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

Age < 65 Communities of Color

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

Age < 65 Communities of Color

Day 1

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

Age < 65 Communities of Color

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

Age < 65 Communities of Color

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 6)

Age < 65 Communities of Color

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

71

10(10, 10)

Age < 65 Communities of Color

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

71

10(10, 10)

Age < 65 Communities of Color

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

71

10(10, 10)

Age < 65 Communities of Color

Day 1

Placebo

Positive

Live virus-nAb MN50

71

31(31, 31)

Age < 65 Communities of Color

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

71

5(5, 5)

Age < 65 Communities of Color

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

71

5(5, 5)

Age < 65 Communities of Color

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

184

15225(10981, 21111)

Age < 65 Communities of Color

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

184

15073(11675, 19460)

Age < 65 Communities of Color

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

184

29395(23444, 36855)

Age < 65 Communities of Color

Day 29

Vaccine

Negative

Live virus-nAb MN50

184

108(84, 138)

Age < 65 Communities of Color

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

184

71(52, 97)

Age < 65 Communities of Color

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

184

157(117, 212)

Age < 65 Communities of Color

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

61

29912(17766, 50360)

Age < 65 Communities of Color

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

61

29822(18371, 48412)

Age < 65 Communities of Color

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

61

57733(42258, 78877)

Age < 65 Communities of Color

Day 29

Vaccine

Positive

Live virus-nAb MN50

61

183(116, 288)

Age < 65 Communities of Color

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

61

132(80, 218)

Age < 65 Communities of Color

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

61

246(152, 396)

Age < 65 Communities of Color

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

Age < 65 Communities of Color

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

Age < 65 Communities of Color

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

Age < 65 Communities of Color

Day 29

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

Age < 65 Communities of Color

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

Age < 65 Communities of Color

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

Age < 65 Communities of Color

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

71

9616(6229, 14845)

Age < 65 Communities of Color

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

71

10405(7005, 15455)

Age < 65 Communities of Color

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

71

15039(11060, 20450)

Age < 65 Communities of Color

Day 29

Placebo

Positive

Live virus-nAb MN50

71

72(56, 94)

Age < 65 Communities of Color

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

71

40(27, 60)

Age < 65 Communities of Color

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

71

109(75, 158)

Age < 65 Communities of Color

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

184

225798(158391, 321891)

Age < 65 Communities of Color

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

184

635700(478247, 844990)

Age < 65 Communities of Color

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

184

1642968(1309743, 2060971)

Age < 65 Communities of Color

Day 57

Vaccine

Negative

Live virus-nAb MN50

184

1009(746, 1364)

Age < 65 Communities of Color

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

184

1298(867, 1944)

Age < 65 Communities of Color

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

184

1750(1265, 2420)

Age < 65 Communities of Color

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

61

662510(365813, 1199844)

Age < 65 Communities of Color

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

61

1996929(1195439, 3335785)

Age < 65 Communities of Color

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

61

4920875(3498156, 6922222)

Age < 65 Communities of Color

Day 57

Vaccine

Positive

Live virus-nAb MN50

61

2140(1278, 3586)

Age < 65 Communities of Color

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

61

3520(1972, 6283)

Age < 65 Communities of Color

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

61

4323(2249, 8307)

Age < 65 Communities of Color

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

Age < 65 Communities of Color

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

Age < 65 Communities of Color

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

Age < 65 Communities of Color

Day 57

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

Age < 65 Communities of Color

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

Age < 65 Communities of Color

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

Age < 65 Communities of Color

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

71

103141(64055, 166079)

Age < 65 Communities of Color

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

71

303905(207110, 445939)

Age < 65 Communities of Color

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

71

516574(333686, 799701)

Age < 65 Communities of Color

Day 57

Placebo

Positive

Live virus-nAb MN50

71

492(287, 844)

Age < 65 Communities of Color

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

71

383(235, 624)

Age < 65 Communities of Color

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

71

1755(1099, 2803)

Age < 65 NA

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

57

10(10, 10)

Age < 65 NA

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

10(10, 10)

Age < 65 NA

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

10(10, 10)

Age < 65 NA

Day 1

Vaccine

Negative

Live virus-nAb MN50

57

31(31, 31)

Age < 65 NA

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

57

5(5, 5)

Age < 65 NA

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

57

5(5, 5)

Age < 65 NA

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

28

10(10, 10)

Age < 65 NA

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

28

10(10, 10)

Age < 65 NA

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

28

10(10, 10)

Age < 65 NA

Day 1

Vaccine

Positive

Live virus-nAb MN50

28

31(31, 31)

Age < 65 NA

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

28

5(5, 5)

Age < 65 NA

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

28

5(5, 5)

Age < 65 NA

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

13

10(10, 10)

Age < 65 NA

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

13

10(10, 10)

Age < 65 NA

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

13

10(10, 10)

Age < 65 NA

Day 1

Placebo

Negative

Live virus-nAb MN50

13

31(31, 31)

Age < 65 NA

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

13

5(5, 5)

Age < 65 NA

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

13

6(4, 7)

Age < 65 NA

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

17

10(10, 10)

Age < 65 NA

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

17

10(10, 10)

Age < 65 NA

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

17

10(10, 10)

Age < 65 NA

Day 1

Placebo

Positive

Live virus-nAb MN50

17

31(31, 31)

Age < 65 NA

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

17

5(5, 5)

Age < 65 NA

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

17

5(5, 5)

Age < 65 NA

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

57

21852(12789, 37338)

Age < 65 NA

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

16367(10352, 25879)

Age < 65 NA

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

39666(26991, 58295)

Age < 65 NA

Day 29

Vaccine

Negative

Live virus-nAb MN50

57

144(91, 229)

Age < 65 NA

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

57

90(51, 158)

Age < 65 NA

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

57

244(133, 447)

Age < 65 NA

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

28

32246(10368, 100284)

Age < 65 NA

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

28

31627(15068, 66386)

Age < 65 NA

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

28

71735(37849, 135956)

Age < 65 NA

Day 29

Vaccine

Positive

Live virus-nAb MN50

28

246(97, 626)

Age < 65 NA

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

28

144(57, 363)

Age < 65 NA

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

28

420(184, 958)

Age < 65 NA

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

13

10(10, 10)

Age < 65 NA

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

13

10(10, 10)

Age < 65 NA

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

13

10(10, 10)

Age < 65 NA

Day 29

Placebo

Negative

Live virus-nAb MN50

13

31(31, 31)

Age < 65 NA

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

13

5(5, 5)

Age < 65 NA

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

13

5(5, 5)

Age < 65 NA

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

17

6966(3231, 15018)

Age < 65 NA

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

17

8208(3783, 17810)

Age < 65 NA

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

17

9630(5602, 16553)

Age < 65 NA

Day 29

Placebo

Positive

Live virus-nAb MN50

17

64(35, 117)

Age < 65 NA

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

17

34(15, 77)

Age < 65 NA

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

17

111(58, 212)

Age < 65 NA

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

57

354263(183187, 685104)

Age < 65 NA

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

971499(597531, 1579515)

Age < 65 NA

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

1915520(1259493, 2913249)

Age < 65 NA

Day 57

Vaccine

Negative

Live virus-nAb MN50

57

1421(804, 2514)

Age < 65 NA

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

57

1495(796, 2810)

Age < 65 NA

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

57

2740(1441, 5210)

Age < 65 NA

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

28

575111(186827, 1770368)

Age < 65 NA

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

28

2275810(1220749, 4242735)

Age < 65 NA

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

28

6106951(3814646, 9776753)

Age < 65 NA

Day 57

Vaccine

Positive

Live virus-nAb MN50

28

3434(1879, 6274)

Age < 65 NA

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

28

3680(847, 15980)

Age < 65 NA

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

28

4801(1073, 21477)

Age < 65 NA

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

13

10(10, 10)

Age < 65 NA

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

13

10(10, 10)

Age < 65 NA

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

13

10(10, 10)

Age < 65 NA

Day 57

Placebo

Negative

Live virus-nAb MN50

13

31(31, 31)

Age < 65 NA

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

13

5(5, 5)

Age < 65 NA

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

13

5(5, 5)

Age < 65 NA

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

17

100450(29034, 347532)

Age < 65 NA

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

17

252837(111209, 574836)

Age < 65 NA

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

17

458256(247599, 848141)

Age < 65 NA

Day 57

Placebo

Positive

Live virus-nAb MN50

17

268(136, 528)

Age < 65 NA

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

17

260(70, 959)

Age < 65 NA

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

17

498(164, 1513)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

191

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

191

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

191

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Negative

Live virus-nAb MN50

191

31(31, 31)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

191

5(5, 5)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

191

5(5, 5)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

56

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Positive

Live virus-nAb MN50

56

31(31, 31)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

56

5(5, 5)

Age < 65 White Non-Hispanic

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

56

5(5, 5)

Age < 65 White Non-Hispanic

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

36

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

36

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

36

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Placebo

Negative

Live virus-nAb MN50

36

31(31, 31)

Age < 65 White Non-Hispanic

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

36

5(5, 5)

Age < 65 White Non-Hispanic

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

36

5(5, 5)

Age < 65 White Non-Hispanic

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

61

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

61

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

61

10(10, 10)

Age < 65 White Non-Hispanic

Day 1

Placebo

Positive

Live virus-nAb MN50

61

31(31, 31)

Age < 65 White Non-Hispanic

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

61

5(5, 6)

Age < 65 White Non-Hispanic

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

61

5(5, 5)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

191

20206(15628, 26125)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

191

21792(16993, 27947)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

191

37874(30932, 46375)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Negative

Live virus-nAb MN50

191

140(112, 176)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

191

87(67, 112)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

191

177(136, 230)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

56

30267(18107, 50593)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

32908(19774, 54765)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

61692(39829, 95555)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Positive

Live virus-nAb MN50

56

147(97, 222)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

56

138(85, 224)

Age < 65 White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

56

249(144, 430)

Age < 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

36

10(10, 10)

Age < 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

36

10(10, 10)

Age < 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

36

10(10, 10)

Age < 65 White Non-Hispanic

Day 29

Placebo

Negative

Live virus-nAb MN50

36

31(31, 31)

Age < 65 White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

36

5(5, 6)

Age < 65 White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

36

5(5, 6)

Age < 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

61

10617(6447, 17484)

Age < 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

61

8086(5166, 12656)

Age < 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

61

14680(10227, 21072)

Age < 65 White Non-Hispanic

Day 29

Placebo

Positive

Live virus-nAb MN50

61

83(54, 127)

Age < 65 White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

61

42(26, 67)

Age < 65 White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

61

151(84, 273)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

191

357009(259114, 491889)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

191

888626(697711, 1131782)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

191

1913249(1547729, 2365094)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Negative

Live virus-nAb MN50

191

1290(953, 1746)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

191

1338(979, 1829)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

191

2687(1939, 3724)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

56

642060(340881, 1209343)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

2177062(1379785, 3435028)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

4131254(2882431, 5921133)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Positive

Live virus-nAb MN50

56

4572(3007, 6951)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

56

3195(1821, 5609)

Age < 65 White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

56

8479(4665, 15413)

Age < 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

36

10(10, 10)

Age < 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

36

10(10, 10)

Age < 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

36

10(10, 10)

Age < 65 White Non-Hispanic

Day 57

Placebo

Negative

Live virus-nAb MN50

36

31(31, 31)

Age < 65 White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

36

5(5, 6)

Age < 65 White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

36

5(5, 5)

Age < 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

61

116557(63410, 214249)

Age < 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

61

393861(229558, 675760)

Age < 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

61

545084(365671, 812524)

Age < 65 White Non-Hispanic

Day 57

Placebo

Positive

Live virus-nAb MN50

61

515(290, 916)

Age < 65 White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

61

381(189, 768)

Age < 65 White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

61

1764(999, 3115)

Age >= 65 Communities of Color

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

217

10(10, 10)

Age >= 65 Communities of Color

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

217

10(10, 10)

Age >= 65 Communities of Color

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

217

10(10, 10)

Age >= 65 Communities of Color

Day 1

Vaccine

Negative

Live virus-nAb MN50

217

31(31, 31)

Age >= 65 Communities of Color

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

217

5(5, 5)

Age >= 65 Communities of Color

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

217

5(5, 5)

Age >= 65 Communities of Color

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

49

10(10, 10)

Age >= 65 Communities of Color

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

49

10(10, 10)

Age >= 65 Communities of Color

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

49

10(10, 10)

Age >= 65 Communities of Color

Day 1

Vaccine

Positive

Live virus-nAb MN50

49

31(31, 31)

Age >= 65 Communities of Color

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

49

5(5, 5)

Age >= 65 Communities of Color

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

49

5(5, 5)

Age >= 65 Communities of Color

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

35

10(10, 10)

Age >= 65 Communities of Color

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

35

10(10, 10)

Age >= 65 Communities of Color

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

35

10(10, 10)

Age >= 65 Communities of Color

Day 1

Placebo

Negative

Live virus-nAb MN50

35

31(31, 31)

Age >= 65 Communities of Color

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

35

5(5, 5)

Age >= 65 Communities of Color

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

35

5(5, 5)

Age >= 65 Communities of Color

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

54

10(10, 10)

Age >= 65 Communities of Color

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

54

10(10, 10)

Age >= 65 Communities of Color

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

54

10(10, 10)

Age >= 65 Communities of Color

Day 1

Placebo

Positive

Live virus-nAb MN50

54

31(31, 31)

Age >= 65 Communities of Color

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

54

5(5, 6)

Age >= 65 Communities of Color

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

54

5(5, 5)

Age >= 65 Communities of Color

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

217

60976(48224, 77101)

Age >= 65 Communities of Color

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

217

77255(63382, 94164)

Age >= 65 Communities of Color

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

217

126794(106328, 151199)

Age >= 65 Communities of Color

Day 29

Vaccine

Negative

Live virus-nAb MN50

217

298(242, 368)

Age >= 65 Communities of Color

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

217

264(208, 334)

Age >= 65 Communities of Color

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

217

505(398, 640)

Age >= 65 Communities of Color

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

49

158096(97307, 256859)

Age >= 65 Communities of Color

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

49

176184(121276, 255950)

Age >= 65 Communities of Color

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

49

280167(215302, 364573)

Age >= 65 Communities of Color

Day 29

Vaccine

Positive

Live virus-nAb MN50

49

541(360, 815)

Age >= 65 Communities of Color

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

49

675(425, 1072)

Age >= 65 Communities of Color

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

49

1010(691, 1476)

Age >= 65 Communities of Color

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

35

10(10, 10)

Age >= 65 Communities of Color

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

35

10(10, 11)

Age >= 65 Communities of Color

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

35

10(10, 10)

Age >= 65 Communities of Color

Day 29

Placebo

Negative

Live virus-nAb MN50

35

31(31, 31)

Age >= 65 Communities of Color

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

35

5(5, 5)

Age >= 65 Communities of Color

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

35

5(5, 5)

Age >= 65 Communities of Color

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

54

27841(18307, 42343)

Age >= 65 Communities of Color

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

54

33326(22782, 48749)

Age >= 65 Communities of Color

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

54

46390(34493, 62391)

Age >= 65 Communities of Color

Day 29

Placebo

Positive

Live virus-nAb MN50

54

158(109, 228)

Age >= 65 Communities of Color

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

54

130(86, 198)

Age >= 65 Communities of Color

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

54

305(203, 456)

Age >= 65 Communities of Color

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

217

1121497(852812, 1474832)

Age >= 65 Communities of Color

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

217

3136695(2516739, 3909366)

Age >= 65 Communities of Color

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

217

5772169(4795005, 6948466)

Age >= 65 Communities of Color

Day 57

Vaccine

Negative

Live virus-nAb MN50

217

3275(2586, 4147)

Age >= 65 Communities of Color

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

217

5980(4425, 8080)

Age >= 65 Communities of Color

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

217

6304(4760, 8349)

Age >= 65 Communities of Color

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

49

4089667(2605308, 6419732)

Age >= 65 Communities of Color

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

49

8924175(6539507, 12178426)

Age >= 65 Communities of Color

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

49

15943674(14399906, 17652946)

Age >= 65 Communities of Color

Day 57

Vaccine

Positive

Live virus-nAb MN50

49

8751(6222, 12309)

Age >= 65 Communities of Color

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

49

30660(16911, 55585)

Age >= 65 Communities of Color

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

49

41609(22641, 76469)

Age >= 65 Communities of Color

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

35

10(10, 10)

Age >= 65 Communities of Color

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

35

10(10, 10)

Age >= 65 Communities of Color

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

35

10(10, 10)

Age >= 65 Communities of Color

Day 57

Placebo

Negative

Live virus-nAb MN50

35

31(31, 31)

Age >= 65 Communities of Color

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

35

5(5, 5)

Age >= 65 Communities of Color

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

35

5(5, 5)

Age >= 65 Communities of Color

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

54

550456(341674, 886814)

Age >= 65 Communities of Color

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

54

1675970(1109382, 2531927)

Age >= 65 Communities of Color

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

54

2414774(1761675, 3309994)

Age >= 65 Communities of Color

Day 57

Placebo

Positive

Live virus-nAb MN50

54

1663(1002, 2760)

Age >= 65 Communities of Color

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

54

2255(1231, 4131)

Age >= 65 Communities of Color

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

54

3397(1919, 6013)

Age >= 65 NA

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

57

10(10, 10)

Age >= 65 NA

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

10(10, 10)

Age >= 65 NA

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

10(10, 10)

Age >= 65 NA

Day 1

Vaccine

Negative

Live virus-nAb MN50

57

31(31, 31)

Age >= 65 NA

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

57

5(5, 5)

Age >= 65 NA

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

57

5(5, 5)

Age >= 65 NA

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

23

10(10, 10)

Age >= 65 NA

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

23

10(10, 10)

Age >= 65 NA

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

23

10(10, 10)

Age >= 65 NA

Day 1

Vaccine

Positive

Live virus-nAb MN50

23

31(31, 31)

Age >= 65 NA

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

23

5(5, 5)

Age >= 65 NA

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

23

5(5, 5)

Age >= 65 NA

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

Age >= 65 NA

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

Age >= 65 NA

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

Age >= 65 NA

Day 1

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

Age >= 65 NA

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 6)

Age >= 65 NA

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

11

5(5, 5)

Age >= 65 NA

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

16

10(10, 10)

Age >= 65 NA

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

16

10(10, 10)

Age >= 65 NA

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

16

10(10, 10)

Age >= 65 NA

Day 1

Placebo

Positive

Live virus-nAb MN50

16

31(31, 31)

Age >= 65 NA

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

16

5(5, 5)

Age >= 65 NA

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

16

5(5, 5)

Age >= 65 NA

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

57

49043(31228, 77020)

Age >= 65 NA

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

53715(36054, 80027)

Age >= 65 NA

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

98141(69907, 137777)

Age >= 65 NA

Day 29

Vaccine

Negative

Live virus-nAb MN50

57

204(133, 312)

Age >= 65 NA

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

57

203(132, 314)

Age >= 65 NA

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

57

354(233, 538)

Age >= 65 NA

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

23

130473(57537, 295867)

Age >= 65 NA

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

23

121838(63001, 235623)

Age >= 65 NA

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

23

279081(183894, 423540)

Age >= 65 NA

Day 29

Vaccine

Positive

Live virus-nAb MN50

23

682(322, 1444)

Age >= 65 NA

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

23

527(229, 1212)

Age >= 65 NA

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

23

915(368, 2271)

Age >= 65 NA

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

Age >= 65 NA

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

Age >= 65 NA

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

Age >= 65 NA

Day 29

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

Age >= 65 NA

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 6)

Age >= 65 NA

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

11

5(5, 5)

Age >= 65 NA

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

16

38243(18850, 77587)

Age >= 65 NA

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

16

49070(27361, 88004)

Age >= 65 NA

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

16

46769(33653, 64997)

Age >= 65 NA

Day 29

Placebo

Positive

Live virus-nAb MN50

16

171(84, 348)

Age >= 65 NA

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

16

147(74, 294)

Age >= 65 NA

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

16

434(181, 1037)

Age >= 65 NA

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

57

811243(465961, 1412384)

Age >= 65 NA

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

2151815(1377198, 3362124)

Age >= 65 NA

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

4991145(3398296, 7330594)

Age >= 65 NA

Day 57

Vaccine

Negative

Live virus-nAb MN50

57

2955(1916, 4557)

Age >= 65 NA

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

57

3637(2018, 6553)

Age >= 65 NA

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

57

4416(2458, 7933)

Age >= 65 NA

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

23

2526030(1138031, 5606899)

Age >= 65 NA

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

23

7169252(4822943, 10657014)

Age >= 65 NA

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

23

12598885(9618396, 16502950)

Age >= 65 NA

Day 57

Vaccine

Positive

Live virus-nAb MN50

23

7706(4284, 13862)

Age >= 65 NA

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

23

31205(9687, 100517)

Age >= 65 NA

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

23

34560(12890, 92663)

Age >= 65 NA

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

Age >= 65 NA

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

Age >= 65 NA

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

Age >= 65 NA

Day 57

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

Age >= 65 NA

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 5)

Age >= 65 NA

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

11

5(5, 5)

Age >= 65 NA

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

16

523872(247776, 1107622)

Age >= 65 NA

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

16

1693133(825083, 3474439)

Age >= 65 NA

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

16

3943154(2654649, 5857069)

Age >= 65 NA

Day 57

Placebo

Positive

Live virus-nAb MN50

16

1978(1002, 3906)

Age >= 65 NA

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

16

1807(568, 5747)

Age >= 65 NA

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

16

3840(1748, 8436)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

198

10(10, 10)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

198

10(10, 10)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

198

10(10, 10)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Negative

Live virus-nAb MN50

198

31(31, 31)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

198

5(5, 5)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

198

5(5, 5)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

56

10(10, 10)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

10(10, 10)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

10(10, 10)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Positive

Live virus-nAb MN50

56

31(31, 31)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

56

5(5, 5)

Age >= 65 White Non-Hispanic

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

56

5(5, 5)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

51

10(10, 10)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

51

10(10, 10)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

51

10(10, 11)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Positive

Live virus-nAb MN50

51

31(31, 31)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

51

5(5, 5)

Age >= 65 White Non-Hispanic

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

51

5(5, 5)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

198

69249(55076, 87069)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

198

73932(60126, 90908)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

198

137647(115459, 164098)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Negative

Live virus-nAb MN50

198

250(199, 313)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

198

312(245, 396)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

198

443(344, 572)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

56

69442(45034, 107080)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

73428(52858, 102003)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

180271(131325, 247459)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Positive

Live virus-nAb MN50

56

319(217, 468)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

56

302(202, 453)

Age >= 65 White Non-Hispanic

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

56

617(410, 929)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

51

33323(19045, 58305)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

51

41024(27015, 62296)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

51

59025(43239, 80575)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Positive

Live virus-nAb MN50

51

150(97, 234)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

51

133(79, 223)

Age >= 65 White Non-Hispanic

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

51

220(129, 376)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

198

1134514(860442, 1495885)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

198

3317133(2680755, 4104581)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

198

6418135(5319106, 7744244)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Negative

Live virus-nAb MN50

198

2795(2150, 3633)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

198

4927(3617, 6712)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

198

6970(5146, 9440)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

56

2356992(1476846, 3761673)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

5369077(3862906, 7462514)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

11772991(9170091, 15114716)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Positive

Live virus-nAb MN50

56

5220(3460, 7876)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

56

10102(5610, 18188)

Age >= 65 White Non-Hispanic

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

56

11507(7227, 18323)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

51

522444(300333, 908818)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

51

1571081(1042702, 2367211)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

51

2514418(1740250, 3632983)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Positive

Live virus-nAb MN50

51

1636(946, 2828)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

51

2451(1341, 4480)

Age >= 65 White Non-Hispanic

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

51

3440(1815, 6520)

Table 6a. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by All participants

Group

Visit

Arm

Baseline COVID

Marker

N

Baseline GMT/GMC

Post Baseline GMT/GMC

GMTR/GMCR

All participants

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

904

10(10, 10)

24220(20801, 28202)

2422.01(2080.08, 2820.15)

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

904

10(10, 10)

24778(21610, 28411)

2467.95(2152.12, 2830.13)

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

904

10(10, 10)

46301(41313, 51891)

4630.07(4131.28, 5189.07)

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

904

31(31, 31)

150(132, 170)

4.82(4.24, 5.48)

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

904

5(5, 5)

106(91, 123)

20.92(18.02, 24.29)

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

904

5(5, 5)

217(186, 253)

42.56(36.43, 49.72)

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

273

10(10, 10)

38929(28974, 52304)

3892.90(2897.42, 5230.41)

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

273

10(10, 10)

40407(31177, 52370)

4040.70(3117.67, 5237.02)

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

273

10(10, 10)

80434(65269, 99124)

8043.43(6526.87, 9912.39)

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

273

31(31, 31)

210(164, 269)

6.75(5.28, 8.64)

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

273

5(5, 5)

173(132, 227)

34.11(25.88, 44.94)

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

273

5(5, 5)

337(255, 445)

67.44(51.10, 89.00)

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

155

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

155

10(10, 10)

10(10, 10)

1.00(1.00, 1.01)

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

155

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

155

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

155

5(5, 5)

5(5, 5)

1.01(0.98, 1.04)

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

155

5(5, 5)

5(5, 5)

1.00(0.94, 1.06)

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

270

10(10, 10)

12225(9438, 15835)

1222.47(943.77, 1583.46)

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

270

10(10, 10)

11927(9430, 15085)

1192.71(943.03, 1508.49)

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

270

10(10, 10)

18081(15037, 21741)

1804.59(1500.90, 2169.74)

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

270

31(31, 31)

88(71, 108)

2.82(2.29, 3.48)

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

270

5(5, 5)

51(40, 65)

9.90(7.76, 12.63)

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

270

5(5, 5)

150(114, 198)

30.06(22.83, 39.58)

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

904

10(10, 10)

402190(335224, 482533)

40219.00(33522.42, 48253.31)

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

904

10(10, 10)

1074131(934344, 1234832)

106984.88(93029.52, 123033.69)

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

904

10(10, 10)

2349481(2085980, 2646267)

234948.11(208598.05, 264626.72)

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

904

31(31, 31)

1465(1241, 1728)

47.12(39.94, 55.60)

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

904

5(5, 5)

1784(1481, 2148)

351.91(292.58, 423.28)

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

904

5(5, 5)

2900(2421, 3473)

568.85(475.00, 681.25)

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

273

10(10, 10)

860317(615674, 1202171)

86031.74(61567.44, 120217.11)

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

273

10(10, 10)

2681811(2105403, 3416023)

268181.05(210540.35, 341602.35)

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

273

10(10, 10)

5800314(4839344, 6952107)

580031.36(483934.38, 695210.73)

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

273

31(31, 31)

3827(3024, 4843)

123.12(97.28, 155.82)

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

273

5(5, 5)

4749(3360, 6714)

936.64(661.16, 1326.88)

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

273

5(5, 5)

7806(5412, 11259)

1561.20(1082.37, 2251.87)

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

155

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

155

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

155

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

155

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

155

5(5, 5)

5(5, 5)

1.01(0.98, 1.04)

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

155

5(5, 5)

5(5, 5)

0.98(0.95, 1.01)

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

270

10(10, 10)

150527(109098, 207686)

15052.65(10909.85, 20768.61)

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

270

10(10, 10)

462227(354280, 603065)

46222.72(35428.03, 60306.48)

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

270

10(10, 10)

723728(582826, 898695)

72234.22(58172.10, 89695.62)

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

270

31(31, 31)

595(443, 799)

19.14(14.25, 25.70)

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

270

5(5, 5)

521(364, 746)

101.40(71.00, 144.83)

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

270

5(5, 5)

1714(1251, 2350)

342.88(250.19, 469.90)

Table 6b. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age

Group

Visit

Arm

Baseline COVID

Marker

N

Baseline GMT/GMC

Post Baseline GMT/GMC

GMTR/GMCR

Age

Age < 65

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

432

10(10, 10)

18658(15448, 22535)

1865.78(1544.78, 2253.48)

Age < 65

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

432

10(10, 10)

18570(15669, 22007)

1847.57(1558.73, 2189.93)

Age < 65

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

432

10(10, 10)

35143(30513, 40475)

3514.28(3051.30, 4047.51)

Age < 65

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

432

31(31, 31)

129(111, 152)

4.17(3.56, 4.88)

Age < 65

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

432

5(5, 5)

82(68, 98)

16.09(13.38, 19.36)

Age < 65

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

432

5(5, 5)

178(147, 216)

34.87(28.77, 42.28)

Age < 65

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

145

10(10, 10)

30497(21247, 43773)

3049.67(2124.69, 4377.34)

Age < 65

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

145

10(10, 10)

31564(22945, 43423)

3156.45(2294.46, 4342.26)

Age < 65

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

145

10(10, 10)

61982(47941, 80136)

6198.21(4794.11, 8013.56)

Age < 65

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

145

31(31, 31)

174(129, 236)

5.61(4.15, 7.58)

Age < 65

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

145

5(5, 5)

137(98, 190)

26.90(19.20, 37.69)

Age < 65

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

145

5(5, 5)

273(194, 383)

54.57(38.86, 76.61)

Age < 65

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

79

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

79

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

79

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

79

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

79

5(5, 5)

5(5, 5)

1.01(0.98, 1.05)

Age < 65

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

79

5(5, 5)

5(5, 5)

1.00(0.93, 1.08)

Age < 65

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

149

10(10, 10)

9585(7004, 13117)

958.48(700.40, 1311.67)

Age < 65

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

149

10(10, 10)

8824(6622, 11759)

882.41(662.19, 1175.87)

Age < 65

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

149

10(10, 10)

13814(11019, 17316)

1381.36(1101.94, 1731.63)

Age < 65

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

149

31(31, 31)

76(59, 98)

2.44(1.90, 3.14)

Age < 65

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

149

5(5, 5)

40(29, 54)

7.73(5.75, 10.39)

Age < 65

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

149

5(5, 5)

129(92, 180)

25.79(18.44, 36.05)

Age < 65

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

432

10(10, 10)

307742(245520, 385733)

30774.21(24552.04, 38573.25)

Age < 65

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

432

10(10, 10)

808208(680044, 960528)

80411.05(67628.81, 95609.20)

Age < 65

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

432

10(10, 10)

1822080(1572698, 2111007)

182208.03(157269.83, 211100.67)

Age < 65

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

432

31(31, 31)

1209(984, 1484)

38.89(31.67, 47.74)

Age < 65

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

432

5(5, 5)

1347(1070, 1694)

265.45(211.36, 333.39)

Age < 65

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

432

5(5, 5)

2347(1879, 2933)

459.34(367.66, 573.88)

Age < 65

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

145

10(10, 10)

636064(421509, 959832)

63606.42(42150.88, 95983.21)

Age < 65

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

145

10(10, 10)

2129806(1580185, 2870596)

212980.59(158018.49, 287059.64)

Age < 65

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

145

10(10, 10)

4719631(3771941, 5905425)

471963.07(377194.10, 590542.48)

Age < 65

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

145

31(31, 31)

3328(2496, 4437)

107.07(80.29, 142.77)

Age < 65

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

145

5(5, 5)

3392(2228, 5165)

666.68(436.68, 1017.83)

Age < 65

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

145

5(5, 5)

6035(3851, 9458)

1207.02(770.16, 1891.66)

Age < 65

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

79

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

79

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

79

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

79

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

79

5(5, 5)

5(5, 5)

1.02(0.97, 1.06)

Age < 65

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

79

5(5, 5)

5(5, 5)

0.97(0.93, 1.01)

Age < 65

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

149

10(10, 10)

109167(73580, 161968)

10916.75(7357.97, 16196.78)

Age < 65

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

149

10(10, 10)

335691(242201, 465269)

33569.15(24220.14, 46526.89)

Age < 65

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

149

10(10, 10)

520333(398930, 678681)

52033.28(39893.04, 67868.05)

Age < 65

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

149

31(31, 31)

456(318, 653)

14.67(10.24, 21.01)

Age < 65

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

149

5(5, 5)

358(231, 555)

69.69(45.09, 107.71)

Age < 65

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

149

5(5, 5)

1432(977, 2099)

286.38(195.33, 419.89)

Age >= 65

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

472

10(10, 10)

63096(53856, 73923)

6309.65(5385.59, 7392.26)

Age >= 65

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

472

10(10, 10)

71407(62056, 82168)

7140.71(6205.56, 8216.77)

Age >= 65

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

472

10(10, 10)

127358(112877, 143697)

12735.83(11287.75, 14369.68)

Age >= 65

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

472

31(31, 31)

256(220, 298)

8.24(7.08, 9.60)

Age >= 65

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

472

5(5, 5)

277(235, 326)

54.83(46.59, 64.53)

Age >= 65

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

472

5(5, 5)

447(378, 528)

88.40(74.79, 104.50)

Age >= 65

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

128

10(10, 10)

102819(75618, 139805)

10281.88(7561.75, 13980.49)

Age >= 65

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

128

10(10, 10)

107940(85062, 136972)

10794.03(8506.19, 13697.19)

Age >= 65

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

128

10(10, 10)

226833(186901, 275296)

22683.27(18690.07, 27529.64)

Age >= 65

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

128

31(31, 31)

440(335, 578)

14.16(10.77, 18.61)

Age >= 65

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

128

5(5, 5)

438(326, 589)

87.66(65.27, 117.75)

Age >= 65

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

128

5(5, 5)

783(585, 1047)

156.61(117.08, 209.49)

Age >= 65

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

76

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

76

10(10, 10)

10(10, 10)

1.01(0.99, 1.03)

Age >= 65

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

76

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

76

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

76

5(5, 5)

5(5, 5)

1.01(0.97, 1.05)

Age >= 65

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

76

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

121

10(10, 10)

31839(22967, 44138)

3183.87(2296.68, 4413.77)

Age >= 65

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

121

10(10, 10)

39035(30117, 50594)

3903.48(3011.67, 5059.37)

Age >= 65

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

121

10(10, 10)

52144(43046, 63165)

5165.32(4270.88, 6247.09)

Age >= 65

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

121

31(31, 31)

156(119, 205)

5.02(3.82, 6.59)

Age >= 65

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

121

5(5, 5)

134(98, 182)

26.15(19.22, 35.57)

Age >= 65

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

121

5(5, 5)

275(198, 381)

54.94(39.65, 76.12)

Age >= 65

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

472

10(10, 10)

1074000(887932, 1299059)

107400.04(88793.22, 129905.95)

Age >= 65

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

472

10(10, 10)

3050568(2626433, 3543196)

305056.84(262643.29, 354319.63)

Age >= 65

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

472

10(10, 10)

5971935(5245378, 6799131)

597193.54(524537.78, 679913.13)

Age >= 65

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

472

31(31, 31)

2964(2499, 3517)

95.38(80.39, 113.15)

Age >= 65

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

472

5(5, 5)

5003(4056, 6170)

990.31(802.59, 1221.94)

Age >= 65

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

472

5(5, 5)

6297(5132, 7727)

1246.76(1016.97, 1528.47)

Age >= 65

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

128

10(10, 10)

2860668(2102225, 3892742)

286066.78(210222.55, 389274.15)

Age >= 65

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

128

10(10, 10)

6708518(5477341, 8216434)

670851.77(547734.08, 821643.42)

Age >= 65

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

128

10(10, 10)

13173416(11520206, 15063871)

1317341.63(1152020.62, 1506387.08)

Age >= 65

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

128

31(31, 31)

6671(5177, 8596)

214.63(166.57, 276.56)

Age >= 65

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

128

5(5, 5)

18112(11950, 27452)

3622.42(2390.03, 5490.30)

Age >= 65

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

128

5(5, 5)

21727(15143, 31174)

4345.45(3028.59, 6234.88)

Age >= 65

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

76

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

76

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

76

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

76

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

76

5(5, 5)

5(5, 5)

0.99(0.96, 1.01)

Age >= 65

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

76

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

121

10(10, 10)

532830(380457, 746228)

53282.96(38045.65, 74622.83)

Age >= 65

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

121

10(10, 10)

1627241(1242074, 2131847)

162724.05(124207.39, 213184.73)

Age >= 65

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

121

10(10, 10)

2650955(2125167, 3306827)

262599.73(210615.56, 327414.62)

Age >= 65

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

121

31(31, 31)

1693(1208, 2373)

54.49(38.88, 76.36)

Age >= 65

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

121

5(5, 5)

2270(1516, 3398)

443.55(297.63, 661.01)

Age >= 65

D57 fold-rise over D1

1243

Placebo

Positive

Pseudovirus-nAb ID80

121

5(5, 5)

3482(2359, 5139)

696.31(471.71, 1027.85)

Table 6c. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Risk for Severe Covid-19

Group

Visit

Arm

Baseline COVID

Marker

N

Baseline GMT/GMC

Post Baseline GMT/GMC

GMTR/GMCR

Risk for Severe Covid-19

At-risk

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

460

10(10, 10)

24877(21066, 29377)

2487.65(2106.58, 2937.67)

At-risk

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

460

10(10, 10)

25704(21957, 30089)

2563.60(2188.82, 3002.56)

At-risk

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

460

10(10, 10)

48231(42255, 55054)

4823.14(4225.45, 5505.36)

At-risk

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

460

31(31, 31)

148(129, 170)

4.77(4.14, 5.49)

At-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

460

5(5, 5)

107(90, 127)

21.02(17.74, 24.91)

At-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

460

5(5, 5)

198(166, 236)

39.20(32.91, 46.71)

At-risk

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

126

10(10, 10)

42911(30641, 60095)

4291.13(3064.13, 6009.47)

At-risk

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

126

10(10, 10)

41011(31745, 52980)

4101.05(3174.54, 5297.98)

At-risk

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

126

10(10, 10)

92863(74600, 115598)

9286.30(7459.95, 11559.77)

At-risk

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

126

31(31, 31)

233(179, 303)

7.49(5.76, 9.75)

At-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

126

5(5, 5)

197(142, 273)

38.81(28.07, 53.65)

At-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

126

5(5, 5)

345(247, 481)

68.94(49.41, 96.19)

At-risk

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

78

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

At-risk

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

78

10(10, 10)

10(10, 10)

1.01(0.99, 1.03)

At-risk

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

78

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

At-risk

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

78

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

At-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

78

5(5, 5)

5(5, 5)

0.99(0.94, 1.05)

At-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

78

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

At-risk

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

120

10(10, 10)

14147(10032, 19949)

1414.70(1003.24, 1994.93)

At-risk

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

120

10(10, 10)

14796(10943, 20005)

1479.56(1094.26, 2000.54)

At-risk

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

120

10(10, 10)

22387(18015, 27820)

2238.69(1801.50, 2781.97)

At-risk

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

120

31(31, 31)

102(78, 133)

3.28(2.51, 4.28)

At-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

120

5(5, 5)

65(48, 88)

12.73(9.43, 17.18)

At-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

120

5(5, 5)

161(114, 227)

32.15(22.78, 45.38)

At-risk

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

460

10(10, 10)

380309(309658, 467078)

38030.86(30965.84, 46707.81)

At-risk

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

460

10(10, 10)

1138126(955524, 1355623)

113513.45(95291.37, 135220.05)

At-risk

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

460

10(10, 10)

2291768(1963317, 2675167)

229176.83(196331.73, 267516.71)

At-risk

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

460

31(31, 31)

1666(1386, 2002)

53.60(44.59, 64.42)

At-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

460

5(5, 5)

1699(1361, 2122)

333.81(267.64, 416.33)

At-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

460

5(5, 5)

2822(2287, 3482)

558.23(452.47, 688.70)

At-risk

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

126

10(10, 10)

996972(698286, 1423418)

99697.22(69828.65, 142341.80)

At-risk

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

126

10(10, 10)

2930696(2188863, 3923945)

293069.57(218886.26, 392394.55)

At-risk

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

126

10(10, 10)

5733510(4581393, 7175359)

573351.01(458139.26, 717535.93)

At-risk

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

126

31(31, 31)

3514(2650, 4659)

113.06(85.26, 149.91)

At-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

126

5(5, 5)

4717(3090, 7201)

928.07(609.86, 1412.32)

At-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

126

5(5, 5)

8763(5969, 12866)

1752.68(1193.79, 2573.22)

At-risk

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

78

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

At-risk

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

78

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

At-risk

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

78

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

At-risk

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

78

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

At-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

78

5(5, 5)

5(5, 5)

0.97(0.93, 1.01)

At-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

78

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

At-risk

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

120

10(10, 10)

198664(137806, 286399)

19866.43(13780.60, 28639.91)

At-risk

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

120

10(10, 10)

599785(434982, 827028)

59978.51(43498.18, 82702.81)

At-risk

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

120

10(10, 10)

980255(758629, 1266628)

98025.51(75862.87, 126662.76)

At-risk

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

120

31(31, 31)

770(536, 1107)

24.79(17.26, 35.60)

At-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

120

5(5, 5)

811(547, 1203)

159.70(107.93, 236.29)

At-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

120

5(5, 5)

1695(1156, 2485)

338.96(231.14, 497.07)

Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

444

10(10, 10)

23982(19654, 29263)

2398.20(1965.37, 2926.35)

Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

444

10(10, 10)

24445(20461, 29205)

2433.52(2036.64, 2907.73)

Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

444

10(10, 10)

45607(39327, 52889)

4560.70(3932.72, 5288.95)

Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

444

31(31, 31)

150(127, 178)

4.84(4.10, 5.72)

Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

444

5(5, 5)

106(87, 129)

20.89(17.19, 25.38)

Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

444

5(5, 5)

224(183, 274)

43.87(35.82, 53.74)

Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

147

10(10, 10)

37661(25792, 54990)

3766.08(2579.24, 5499.03)

Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

147

10(10, 10)

40204(28724, 56272)

4020.38(2872.36, 5627.24)

Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

147

10(10, 10)

76599(58477, 100336)

7659.87(5847.73, 10033.56)

Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

147

31(31, 31)

203(147, 279)

6.52(4.74, 8.97)

Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

147

5(5, 5)

165(117, 233)

32.64(22.95, 46.43)

Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

147

5(5, 5)

335(235, 477)

66.93(46.98, 95.37)

Not at-risk

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

77

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not at-risk

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

77

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not at-risk

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

77

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not at-risk

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

77

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Not at-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

77

5(5, 5)

5(5, 5)

1.02(0.98, 1.05)

Not at-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

77

5(5, 5)

5(5, 6)

1.00(0.93, 1.08)

Not at-risk

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

150

10(10, 10)

11688(8474, 16119)

1168.76(847.45, 1611.89)

Not at-risk

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

150

10(10, 10)

11162(8329, 14958)

1116.19(832.92, 1495.80)

Not at-risk

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

150

10(10, 10)

16930(13432, 21339)

1688.80(1339.99, 2128.42)

Not at-risk

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

150

31(31, 31)

84(65, 109)

2.70(2.08, 3.50)

Not at-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

150

5(5, 5)

47(35, 64)

9.16(6.75, 12.42)

Not at-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

150

5(5, 5)

147(104, 208)

29.44(20.87, 41.53)

Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

444

10(10, 10)

410590(323795, 520651)

41059.01(32379.53, 52065.06)

Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

444

10(10, 10)

1051406(878650, 1258128)

104668.70(87427.58, 125309.86)

Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

444

10(10, 10)

2371172(2036164, 2761300)

237117.24(203616.36, 276129.99)

Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

444

31(31, 31)

1397(1125, 1733)

44.93(36.21, 55.77)

Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

444

5(5, 5)

1816(1427, 2310)

358.85(282.55, 455.76)

Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

444

5(5, 5)

2929(2317, 3703)

572.83(453.12, 724.16)

Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

147

10(10, 10)

818251(531355, 1260049)

81825.05(53135.53, 126004.94)

Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

147

10(10, 10)

2602083(1910844, 3543374)

260208.27(191084.39, 354337.40)

Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

147

10(10, 10)

5823208(4625122, 7331644)

582320.80(462512.23, 733164.43)

Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

147

31(31, 31)

3939(2917, 5320)

126.74(93.85, 171.16)

Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

147

5(5, 5)

4760(3065, 7393)

939.57(602.95, 1464.11)

Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

147

5(5, 5)

7505(4676, 12045)

1500.97(935.18, 2409.06)

Not at-risk

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

77

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not at-risk

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

77

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not at-risk

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

77

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not at-risk

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

77

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Not at-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

77

5(5, 5)

5(5, 5)

1.02(0.98, 1.07)

Not at-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

77

5(5, 5)

5(5, 5)

0.97(0.93, 1.01)

Not at-risk

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

150

10(10, 10)

138210(92120, 207361)

13821.00(9211.96, 20736.10)

Not at-risk

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

150

10(10, 10)

426627(305619, 595547)

42662.70(30561.92, 59554.69)

Not at-risk

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

150

10(10, 10)

659233(502270, 865248)

65758.25(50101.92, 86307.02)

Not at-risk

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

150

31(31, 31)

549(380, 794)

17.67(12.22, 25.56)

Not at-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

150

5(5, 5)

455(289, 715)

88.18(56.20, 138.34)

Not at-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

150

5(5, 5)

1720(1159, 2554)

344.09(231.81, 510.76)

Table 6d. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Risk for Severe Covid-19

Group

Visit

Arm

Baseline COVID

Marker

N

Baseline GMT/GMC

Post Baseline GMT/GMC

GMTR/GMCR

Age, Risk for Severe Covid-19

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

216

10(10, 10)

15573(12291, 19732)

1557.29(1229.05, 1973.20)

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

10(10, 10)

15353(12212, 19303)

1528.57(1214.61, 1923.69)

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

10(10, 10)

28809(23868, 34773)

2880.94(2386.84, 3477.33)

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

216

31(31, 31)

111(92, 134)

3.56(2.94, 4.30)

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

216

5(5, 5)

66(52, 85)

13.00(10.24, 16.50)

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

216

5(5, 5)

131(103, 168)

26.15(20.42, 33.49)

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

73

10(10, 10)

31496(19820, 50049)

3149.58(1982.03, 5004.90)

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

73

10(10, 10)

26426(18770, 37205)

2642.61(1876.99, 3720.52)

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

73

10(10, 10)

61629(46183, 82240)

6162.88(4618.32, 8223.99)

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

73

31(31, 31)

176(125, 247)

5.65(4.02, 7.93)

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

73

5(5, 5)

154(99, 241)

30.08(19.32, 46.83)

Age < 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

73

5(5, 5)

244(153, 388)

48.71(30.58, 77.60)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

39

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

39

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

39

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

39

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

39

5(5, 6)

5(5, 5)

0.97(0.91, 1.03)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

39

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

75

10(10, 10)

10580(6916, 16185)

1058.04(691.65, 1618.53)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

75

10(10, 10)

10488(7074, 15550)

1048.80(707.39, 1554.98)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

75

10(10, 10)

16856(12606, 22539)

1685.62(1260.63, 2253.88)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

75

31(31, 31)

90(65, 123)

2.88(2.10, 3.96)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

75

5(5, 5)

50(35, 72)

9.94(6.97, 14.17)

Age < 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

75

5(5, 5)

132(88, 198)

26.36(17.52, 39.64)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

216

10(10, 10)

223078(166792, 298359)

22307.81(16679.20, 29835.87)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

10(10, 10)

706517(549446, 908489)

70340.01(54691.10, 90466.58)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

10(10, 10)

1471756(1181271, 1833674)

147175.61(118127.13, 183367.37)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

216

31(31, 31)

1195(918, 1556)

38.46(29.54, 50.08)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

216

5(5, 5)

1048(765, 1436)

205.26(150.32, 280.29)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

216

5(5, 5)

1728(1292, 2312)

343.92(256.83, 460.54)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

73

10(10, 10)

633405(390586, 1027180)

63340.53(39058.62, 102717.98)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

73

10(10, 10)

1991662(1337027, 2966819)

199166.15(133702.67, 296681.85)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

73

10(10, 10)

4099034(3012770, 5576953)

409903.41(301277.04, 557695.35)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

73

31(31, 31)

2877(1988, 4162)

92.56(63.97, 133.91)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

73

5(5, 5)

2857(1666, 4900)

557.60(327.00, 950.81)

Age < 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

73

5(5, 5)

5836(3497, 9740)

1167.25(699.41, 1948.04)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

39

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

39

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

39

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

39

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

39

5(5, 6)

5(5, 5)

0.97(0.91, 1.03)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

39

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

75

10(10, 10)

133749(83326, 214685)

13374.90(8332.57, 21468.52)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

75

10(10, 10)

383038(253510, 578749)

38303.83(25350.96, 57874.86)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

75

10(10, 10)

659212(474785, 915279)

65921.20(47478.47, 91527.88)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

75

31(31, 31)

550(346, 876)

17.71(11.12, 28.20)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

75

5(5, 5)

510(319, 814)

100.58(63.14, 160.22)

Age < 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

75

5(5, 5)

1374(873, 2162)

274.81(174.66, 432.39)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

216

10(10, 10)

19544(15538, 24583)

1954.44(1553.84, 2458.32)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

10(10, 10)

19500(15882, 23941)

1939.75(1579.67, 2381.92)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

10(10, 10)

36983(31175, 43874)

3698.34(3117.50, 4387.39)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

216

31(31, 31)

135(111, 163)

4.34(3.58, 5.25)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

216

5(5, 5)

86(69, 108)

17.00(13.59, 21.27)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

216

5(5, 5)

193(153, 243)

37.55(29.73, 47.43)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

72

10(10, 10)

30233(19445, 47008)

3023.35(1944.49, 4700.80)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

10(10, 10)

33109(22325, 49104)

3310.95(2232.46, 4910.45)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

10(10, 10)

62078(45232, 85198)

6207.75(4523.16, 8519.76)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

72

31(31, 31)

174(120, 252)

5.60(3.86, 8.11)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

72

5(5, 5)

133(89, 198)

26.10(17.31, 39.37)

Age < 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

72

5(5, 5)

281(186, 425)

56.26(37.26, 84.94)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

40

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

40

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

40

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

40

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

40

5(5, 5)

5(5, 5)

1.02(0.98, 1.06)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

40

5(5, 5)

5(5, 6)

1.00(0.91, 1.10)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

74

10(10, 10)

9353(6416, 13636)

935.31(641.56, 1363.55)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

74

10(10, 10)

8455(5990, 11934)

845.45(598.96, 1193.39)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

74

10(10, 10)

13149(10011, 17270)

1314.90(1001.13, 1727.02)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

74

31(31, 31)

73(54, 99)

2.34(1.73, 3.17)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

74

5(5, 5)

37(26, 54)

7.26(5.08, 10.39)

Age < 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

74

5(5, 5)

128(85, 192)

25.65(17.09, 38.48)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

216

10(10, 10)

334258(254171, 439580)

33425.84(25417.12, 43958.03)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

216

10(10, 10)

836616(680060, 1029211)

83223.21(67610.33, 102441.48)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

216

10(10, 10)

1924817(1613922, 2295601)

192481.68(161392.17, 229560.08)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

216

31(31, 31)

1212(945, 1554)

38.99(30.41, 50.01)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

216

5(5, 5)

1436(1089, 1895)

283.58(215.40, 373.35)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

216

5(5, 5)

2540(1939, 3325)

494.79(377.87, 647.88)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

72

10(10, 10)

636781(384043, 1055845)

63678.12(38404.34, 105584.47)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

10(10, 10)

2168568(1507995, 3118502)

216856.78(150799.52, 311850.22)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

10(10, 10)

4902017(3734241, 6434980)

490201.65(373424.10, 643498.00)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

72

31(31, 31)

3461(2435, 4918)

111.35(78.35, 158.23)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

72

5(5, 5)

3553(2126, 5936)

699.50(416.96, 1173.50)

Age < 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

72

5(5, 5)

6090(3502, 10589)

1217.94(700.41, 2117.88)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

40

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

40

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

40

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

40

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

40

5(5, 5)

5(5, 5)

1.03(0.98, 1.08)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

40

5(5, 5)

5(5, 5)

0.96(0.92, 1.01)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

74

10(10, 10)

103812(64361, 167445)

10381.21(6436.11, 16744.51)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

74

10(10, 10)

324898(219045, 481905)

32489.82(21904.49, 48190.51)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

74

10(10, 10)

490719(355848, 676707)

49071.89(35584.83, 67670.71)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

74

31(31, 31)

435(282, 671)

14.00(9.07, 21.60)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

74

5(5, 5)

329(193, 560)

63.64(37.42, 108.20)

Age < 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

74

5(5, 5)

1447(910, 2301)

289.32(181.91, 460.17)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

244

10(10, 10)

49545(39836, 61621)

4954.55(3983.63, 6162.11)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

244

10(10, 10)

54849(45118, 66679)

5484.91(4511.78, 6667.93)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

244

10(10, 10)

102923(86487, 122483)

10292.34(8648.72, 12248.31)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

244

31(31, 31)

227(185, 280)

7.32(5.95, 9.00)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

244

5(5, 5)

216(172, 272)

42.62(33.89, 53.60)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

244

5(5, 5)

363(287, 459)

71.13(56.27, 89.90)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

53

10(10, 10)

79825(53405, 119318)

7982.55(5340.45, 11931.77)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

53

10(10, 10)

99071(69908, 140398)

9907.06(6990.82, 14039.82)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

53

10(10, 10)

211444(154527, 289326)

21144.43(15452.72, 28932.58)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

53

31(31, 31)

410(275, 613)

13.20(8.83, 19.74)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

53

5(5, 5)

323(217, 482)

64.70(43.39, 96.48)

Age >= 65 At-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

53

5(5, 5)

692(483, 992)

138.40(96.51, 198.46)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

39

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

39

10(10, 10)

10(10, 11)

1.02(0.98, 1.06)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

39

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

39

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

39

5(5, 5)

5(5, 6)

1.02(0.94, 1.11)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

39

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

45

10(10, 10)

25709(14359, 46031)

2570.93(1435.92, 4603.12)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

45

10(10, 10)

30021(19320, 46650)

3002.11(1931.98, 4665.00)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

45

10(10, 10)

40124(30025, 53619)

4012.36(3002.47, 5361.94)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

45

31(31, 31)

133(82, 216)

4.28(2.64, 6.94)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

45

5(5, 5)

108(61, 190)

21.17(12.16, 36.86)

Age >= 65 At-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

45

5(5, 5)

242(128, 457)

48.39(25.61, 91.43)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

244

10(10, 10)

833523(633917, 1095981)

83352.33(63391.70, 109598.12)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

244

10(10, 10)

2294936(1835361, 2869588)

229493.57(183536.11, 286958.79)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

244

10(10, 10)

4396225(3585945, 5389596)

439622.46(358594.45, 538959.56)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

244

31(31, 31)

2713(2142, 3438)

87.31(68.90, 110.62)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

244

5(5, 5)

3460(2575, 4650)

682.55(507.39, 918.17)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

244

5(5, 5)

5805(4327, 7790)

1138.22(850.52, 1523.25)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

53

10(10, 10)

2477720(1575376, 3896911)

247772.04(157537.57, 389691.06)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

53

10(10, 10)

6362749(4433678, 9131150)

636274.91(443367.76, 913115.01)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

53

10(10, 10)

11243710(8578951, 14736185)

1124371.00(857895.12, 1473618.54)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

53

31(31, 31)

5250(3474, 7933)

168.92(111.79, 255.25)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

53

5(5, 5)

12900(6611, 25173)

2580.05(1322.21, 5034.52)

Age >= 65 At-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

53

5(5, 5)

19814(11709, 33531)

3962.81(2341.71, 6706.16)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

39

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

39

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

39

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

39

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

39

5(5, 5)

5(5, 5)

0.98(0.93, 1.02)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

39

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

45

10(10, 10)

448178(258490, 777063)

44817.80(25849.05, 77706.35)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

45

10(10, 10)

1508221(920499, 2471195)

150822.14(92049.88, 247119.49)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

45

10(10, 10)

2216494(1489129, 3299140)

221649.37(148912.87, 329914.02)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

45

31(31, 31)

1539(883, 2683)

49.52(28.41, 86.32)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

45

5(5, 5)

2108(1021, 4350)

413.20(201.28, 848.24)

Age >= 65 At-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

45

5(5, 5)

2609(1286, 5293)

521.79(257.19, 1058.61)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

228

10(10, 10)

81142(64826, 101565)

8114.24(6482.62, 10156.52)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

228

10(10, 10)

93960(77358, 114124)

9395.96(7735.83, 11412.36)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

228

10(10, 10)

158956(135136, 186975)

15895.61(13513.57, 18697.54)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

228

31(31, 31)

290(232, 362)

9.33(7.47, 11.66)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

228

5(5, 5)

359(286, 449)

71.26(56.85, 89.33)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

228

5(5, 5)

554(438, 701)

110.85(87.69, 140.13)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

75

10(10, 10)

123517(80177, 190287)

12351.73(8017.66, 19028.65)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

75

10(10, 10)

114859(83777, 157474)

11485.94(8377.66, 15747.44)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

75

10(10, 10)

238678(186461, 305518)

23867.83(18646.15, 30551.78)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

75

31(31, 31)

463(319, 671)

14.89(10.27, 21.59)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

75

5(5, 5)

546(366, 815)

109.25(73.18, 163.09)

Age >= 65 Not at-risk

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

75

5(5, 5)

856(559, 1312)

171.29(111.82, 262.39)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

37

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

37

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

37

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

37

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

37

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

37

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

76

10(10, 10)

36294(24581, 53589)

3629.44(2458.13, 5358.90)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

76

10(10, 10)

45846(33364, 62997)

4584.58(3336.39, 6299.74)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

76

10(10, 10)

61223(47794, 78426)

6029.67(4720.14, 7702.50)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

76

31(31, 31)

172(124, 239)

5.53(3.99, 7.68)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

76

5(5, 5)

153(106, 219)

29.76(20.69, 42.83)

Age >= 65 Not at-risk

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

76

5(5, 5)

297(207, 425)

59.38(41.48, 85.01)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

228

10(10, 10)

1398099(1078520, 1812374)

139809.89(107851.97, 181237.35)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

228

10(10, 10)

4101890(3391549, 4961009)

410189.02(339154.85, 496100.92)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

228

10(10, 10)

8213421(7089936, 9514935)

821342.06(708993.59, 951493.49)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

228

31(31, 31)

3250(2538, 4162)

104.57(81.66, 133.90)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

228

5(5, 5)

7341(5507, 9786)

1458.61(1094.30, 1944.21)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

228

5(5, 5)

6853(5155, 9111)

1370.68(1031.09, 1822.10)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

75

10(10, 10)

3174630(2087124, 4828787)

317463.04(208712.41, 482878.72)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

75

10(10, 10)

6970743(5512037, 8815480)

697074.29(551203.74, 881548.02)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

75

10(10, 10)

14775510(13154081, 16596803)

1477550.96(1315408.07, 1659680.30)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

75

31(31, 31)

7935(5831, 10799)

255.31(187.60, 347.44)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

75

5(5, 5)

23161(14027, 38241)

4632.16(2805.46, 7648.27)

Age >= 65 Not at-risk

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

75

5(5, 5)

23228(14231, 37913)

4645.59(2846.16, 7582.67)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

37

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

37

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

37

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

37

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

37

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

37

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

76

10(10, 10)

592400(385720, 909825)

59239.96(38571.97, 90982.46)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

76

10(10, 10)

1704740(1240372, 2342956)

170473.95(124037.17, 234295.64)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

76

10(10, 10)

2958150(2280493, 3837175)

291337.00(224716.08, 377708.83)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

76

31(31, 31)

1796(1171, 2753)

57.77(37.67, 88.59)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

76

5(5, 5)

2375(1471, 3837)

463.23(288.59, 743.55)

Age >= 65 Not at-risk

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

76

5(5, 5)

4155(2631, 6560)

830.92(526.27, 1311.93)

Table 6e. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Sex

Group

Visit

Arm

Baseline COVID

Marker

N

Baseline GMT/GMC

Post Baseline GMT/GMC

GMTR/GMCR

Sex

Female

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

511

10(10, 10)

24675(20170, 30188)

2467.54(2016.95, 3018.78)

Female

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

511

10(10, 10)

23270(19286, 28078)

2313.42(1917.00, 2791.82)

Female

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

511

10(10, 10)

48501(41686, 56429)

4850.08(4168.64, 5642.91)

Female

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

511

31(31, 31)

143(121, 168)

4.59(3.91, 5.40)

Female

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

511

5(5, 5)

105(86, 127)

20.53(16.95, 24.88)

Female

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

511

5(5, 5)

208(168, 256)

41.23(33.39, 50.92)

Female

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

149

10(10, 10)

40523(26281, 62486)

4052.35(2628.05, 6248.55)

Female

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

149

10(10, 10)

39866(27351, 58108)

3986.58(2735.06, 5810.77)

Female

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

149

10(10, 10)

76435(56772, 102910)

7643.53(5677.17, 10290.96)

Female

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

149

31(31, 31)

206(144, 296)

6.63(4.63, 9.52)

Female

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

149

5(5, 5)

176(117, 264)

34.39(22.59, 52.35)

Female

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

149

5(5, 5)

340(219, 529)

68.10(43.86, 105.74)

Female

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

85

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Female

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

85

10(10, 10)

10(10, 10)

1.00(1.00, 1.01)

Female

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

85

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Female

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

85

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Female

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

85

5(5, 5)

5(5, 5)

1.02(0.97, 1.07)

Female

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

85

5(5, 5)

5(5, 5)

0.98(0.94, 1.02)

Female

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

149

10(10, 10)

10162(6967, 14822)

1016.18(696.69, 1482.19)

Female

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

149

10(10, 10)

11046(8047, 15164)

1104.64(804.69, 1516.40)

Female

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

149

10(10, 10)

16347(12596, 21215)

1629.48(1255.82, 2114.32)

Female

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

149

31(31, 31)

85(63, 115)

2.74(2.02, 3.71)

Female

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

149

5(5, 5)

49(34, 70)

9.41(6.66, 13.30)

Female

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

149

5(5, 5)

147(101, 215)

29.45(20.14, 43.07)

Female

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

511

10(10, 10)

400820(314179, 511355)

40082.05(31417.90, 51135.51)

Female

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

511

10(10, 10)

1145402(944407, 1389174)

113871.15(93807.40, 138226.17)

Female

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

511

10(10, 10)

2398857(2045123, 2813774)

239885.69(204512.29, 281377.44)

Female

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

511

31(31, 31)

1406(1123, 1760)

45.24(36.14, 56.64)

Female

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

511

5(5, 5)

1667(1313, 2116)

326.58(258.11, 413.21)

Female

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

511

5(5, 5)

2894(2310, 3625)

574.87(458.70, 720.45)

Female

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

149

10(10, 10)

880697(553974, 1400115)

88069.72(55397.39, 140011.55)

Female

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

149

10(10, 10)

2676980(1849659, 3874348)

267698.00(184965.87, 387434.83)

Female

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

149

10(10, 10)

5513577(4222152, 7200008)

551357.71(422215.24, 720000.82)

Female

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

149

31(31, 31)

3595(2579, 5011)

115.66(82.97, 161.21)

Female

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

149

5(5, 5)

4659(3056, 7103)

912.05(594.31, 1399.67)

Female

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

149

5(5, 5)

8107(5219, 12593)

1621.44(1043.88, 2518.56)

Female

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

85

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Female

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

85

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Female

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

85

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Female

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

85

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Female

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

85

5(5, 5)

5(5, 5)

1.02(0.96, 1.08)

Female

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

85

5(5, 5)

5(5, 5)

0.98(0.94, 1.02)

Female

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

149

10(10, 10)

127886(80843, 202302)

12788.60(8084.34, 20230.24)

Female

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

149

10(10, 10)

433107(297108, 631359)

43310.69(29710.78, 63135.87)

Female

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

149

10(10, 10)

735382(548585, 985783)

73303.07(54688.16, 98254.17)

Female

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

149

31(31, 31)

546(359, 832)

17.58(11.55, 26.77)

Female

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

149

5(5, 5)

537(320, 900)

103.11(61.70, 172.34)

Female

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

149

5(5, 5)

1609(1018, 2543)

321.78(203.59, 508.59)

Male

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

393

10(10, 10)

23651(18727, 29871)

2365.13(1872.69, 2987.06)

Male

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

393

10(10, 10)

26846(21982, 32786)

2680.27(2194.34, 3273.81)

Male

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

393

10(10, 10)

43637(36731, 51842)

4363.70(3673.07, 5184.18)

Male

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

393

31(31, 31)

159(130, 196)

5.13(4.17, 6.31)

Male

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

393

5(5, 5)

108(85, 136)

21.43(16.93, 27.14)

Male

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

393

5(5, 5)

230(183, 289)

44.32(35.16, 55.87)

Male

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

124

10(10, 10)

37143(24890, 55427)

3714.29(2489.01, 5542.75)

Male

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

124

10(10, 10)

41050(28647, 58823)

4104.97(2864.67, 5882.27)

Male

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

124

10(10, 10)

85380(63299, 115163)

8537.97(6329.91, 11516.28)

Male

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

124

31(31, 31)

214(153, 299)

6.90(4.94, 9.63)

Male

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

124

5(5, 5)

170(120, 241)

33.78(23.82, 47.89)

Male

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

124

5(5, 5)

333(241, 462)

66.67(48.15, 92.31)

Male

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

70

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Male

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

70

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Male

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

70

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Male

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

70

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Male

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

70

5(5, 5)

5(5, 5)

1.00(0.98, 1.02)

Male

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

70

5(5, 5)

5(5, 6)

1.03(0.92, 1.16)

Male

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

121

10(10, 10)

16104(11768, 22037)

1610.40(1176.81, 2203.75)

Male

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

121

10(10, 10)

13373(9368, 19089)

1337.25(936.81, 1908.86)

Male

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

121

10(10, 10)

21013(16320, 27055)

2101.28(1632.00, 2705.50)

Male

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

121

31(31, 31)

92(71, 119)

2.96(2.28, 3.83)

Male

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

121

5(5, 5)

54(39, 75)

10.67(7.69, 14.81)

Male

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

121

5(5, 5)

155(105, 229)

30.98(20.94, 45.85)

Male

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

393

10(10, 10)

403945(306778, 531888)

40394.47(30677.76, 53188.80)

Male

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

393

10(10, 10)

989572(809739, 1209345)

98797.38(80841.48, 120741.52)

Male

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

393

10(10, 10)

2287936(1911349, 2738720)

228793.57(191134.93, 273871.95)

Male

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

393

31(31, 31)

1543(1209, 1968)

49.64(38.91, 63.32)

Male

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

393

5(5, 5)

1945(1450, 2608)

387.12(288.67, 519.16)

Male

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

393

5(5, 5)

2907(2163, 3906)

561.27(418.01, 753.63)

Male

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

124

10(10, 10)

837070(508960, 1376704)

83707.05(50895.98, 137670.39)

Male

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

124

10(10, 10)

2687473(1984480, 3639499)

268747.34(198448.02, 363949.89)

Male

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

124

10(10, 10)

6154788(4871860, 7775556)

615478.82(487185.98, 777555.58)

Male

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

124

31(31, 31)

4117(2977, 5694)

132.47(95.78, 183.21)

Male

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

124

5(5, 5)

4857(2726, 8655)

966.24(542.62, 1720.58)

Male

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

124

5(5, 5)

7468(4045, 13788)

1493.55(808.91, 2757.67)

Male

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

70

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Male

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

70

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Male

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

70

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Male

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

70

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Male

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

70

5(5, 5)

5(5, 5)

0.99(0.98, 1.01)

Male

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

70

5(5, 5)

5(5, 5)

0.98(0.93, 1.02)

Male

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

121

10(10, 10)

191945(124873, 295044)

19194.50(12487.26, 29504.38)

Male

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

121

10(10, 10)

509328(355055, 730634)

50932.85(35505.51, 73063.44)

Male

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

121

10(10, 10)

706692(517642, 964786)

70669.22(51764.20, 96478.61)

Male

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

121

31(31, 31)

675(455, 1001)

21.72(14.65, 32.20)

Male

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

121

5(5, 5)

498(317, 783)

98.90(62.99, 155.29)

Male

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

121

5(5, 5)

1885(1264, 2810)

376.94(252.78, 562.07)

Table 6f. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, sex

Group

Visit

Arm

Baseline COVID

Marker

N

Baseline GMT/GMC

Post Baseline GMT/GMC

GMTR/GMCR

Age, sex

Age < 65 Female

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

245

10(10, 10)

18805(14651, 24138)

1880.53(1465.05, 2413.84)

Age < 65 Female

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

245

10(10, 10)

17080(13531, 21561)

1695.35(1342.74, 2140.56)

Age < 65 Female

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

245

10(10, 10)

36784(30495, 44371)

3678.43(3049.50, 4437.06)

Age < 65 Female

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

245

31(31, 31)

122(100, 149)

3.93(3.22, 4.79)

Age < 65 Female

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

245

5(5, 5)

81(63, 102)

15.72(12.41, 19.92)

Age < 65 Female

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

245

5(5, 5)

170(131, 221)

33.80(26.03, 43.89)

Age < 65 Female

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

77

10(10, 10)

32426(18936, 55526)

3242.62(1893.62, 5552.63)

Age < 65 Female

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

77

10(10, 10)

31223(19512, 49964)

3122.30(1951.16, 4996.37)

Age < 65 Female

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

77

10(10, 10)

58267(40204, 84446)

5826.71(4020.38, 8444.61)

Age < 65 Female

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

77

31(31, 31)

167(107, 262)

5.38(3.44, 8.41)

Age < 65 Female

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

77

5(5, 5)

142(86, 236)

27.73(16.47, 46.70)

Age < 65 Female

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

77

5(5, 5)

281(162, 485)

56.15(32.47, 97.10)

Age < 65 Female

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

45

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Female

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

45

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Female

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

45

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Female

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

45

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 Female

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

45

5(5, 5)

5(5, 5)

1.02(0.96, 1.08)

Age < 65 Female

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

45

5(5, 5)

5(5, 5)

0.97(0.92, 1.03)

Age < 65 Female

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

89

10(10, 10)

8481(5442, 13217)

848.09(544.19, 1321.71)

Age < 65 Female

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

89

10(10, 10)

8619(5926, 12535)

861.90(592.62, 1253.52)

Age < 65 Female

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

89

10(10, 10)

13365(9818, 18194)

1336.50(981.76, 1819.41)

Age < 65 Female

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

89

31(31, 31)

80(56, 115)

2.59(1.81, 3.70)

Age < 65 Female

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

89

5(5, 6)

42(28, 64)

8.05(5.36, 12.09)

Age < 65 Female

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

89

5(5, 5)

142(90, 222)

28.32(18.07, 44.37)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

245

10(10, 10)

305392(225868, 412914)

30539.15(22586.79, 41291.38)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

245

10(10, 10)

871117(685980, 1106221)

86466.05(68012.40, 109926.68)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

245

10(10, 10)

1848519(1516807, 2252774)

184851.88(151680.66, 225277.35)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

245

31(31, 31)

1169(886, 1544)

37.62(28.49, 49.67)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

245

5(5, 5)

1218(908, 1635)

237.90(178.14, 317.71)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

245

5(5, 5)

2344(1778, 3091)

465.84(353.11, 614.55)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

77

10(10, 10)

626692(351749, 1116543)

62669.22(35174.93, 111654.25)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

77

10(10, 10)

2096714(1319664, 3331310)

209671.41(131966.38, 333131.04)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

77

10(10, 10)

4296627(3069038, 6015241)

429662.71(306903.82, 601524.10)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

77

31(31, 31)

2954(1953, 4469)

95.06(62.84, 143.79)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

77

5(5, 5)

3157(1886, 5287)

614.55(363.85, 1038.00)

Age < 65 Female

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

77

5(5, 5)

6212(3603, 10709)

1242.30(720.57, 2141.80)

Age < 65 Female

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

45

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Female

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

45

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Female

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

45

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Female

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

45

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 Female

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

45

5(5, 5)

5(5, 6)

1.03(0.95, 1.11)

Age < 65 Female

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

45

5(5, 5)

5(5, 5)

0.97(0.92, 1.03)

Age < 65 Female

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

89

10(10, 10)

101287(58876, 174249)

10128.69(5887.57, 17424.91)

Age < 65 Female

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

89

10(10, 10)

334614(214228, 522650)

33461.38(21422.80, 52265.05)

Age < 65 Female

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

89

10(10, 10)

586813(415547, 828663)

58681.26(41554.75, 82866.35)

Age < 65 Female

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

89

31(31, 31)

439(267, 720)

14.11(8.60, 23.16)

Age < 65 Female

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

89

5(5, 6)

413(225, 758)

78.91(43.09, 144.53)

Age < 65 Female

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

89

5(5, 5)

1417(826, 2431)

283.35(165.16, 486.14)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

187

10(10, 10)

18470(13815, 24695)

1847.03(1381.46, 2469.49)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

187

10(10, 10)

20671(16126, 26498)

2062.88(1608.92, 2644.92)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

187

10(10, 10)

33145(26769, 41040)

3314.51(2676.89, 4104.02)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

187

31(31, 31)

139(108, 180)

4.49(3.47, 5.80)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

187

5(5, 5)

83(62, 111)

16.58(12.36, 22.24)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

187

5(5, 5)

189(142, 251)

36.30(27.24, 48.38)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

68

10(10, 10)

28434(17580, 45989)

2843.41(1758.03, 4598.88)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

68

10(10, 10)

31959(20688, 49370)

3195.89(2068.79, 4937.04)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

68

10(10, 10)

66513(46326, 95499)

6651.35(4632.57, 9549.88)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

68

31(31, 31)

183(123, 272)

5.88(3.95, 8.76)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

68

5(5, 5)

131(86, 199)

25.99(17.09, 39.50)

Age < 65 Male

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

68

5(5, 5)

264(179, 389)

52.81(35.84, 77.81)

Age < 65 Male

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

34

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Male

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

34

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Male

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

34

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Male

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

34

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 Male

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

34

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age < 65 Male

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

34

5(5, 6)

5(5, 6)

1.04(0.89, 1.21)

Age < 65 Male

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

60

10(10, 10)

11758(7947, 17397)

1175.84(794.73, 1739.69)

Age < 65 Male

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

60

10(10, 10)

9178(5805, 14509)

917.77(580.53, 1450.91)

Age < 65 Male

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

60

10(10, 10)

14597(10534, 20227)

1459.67(1053.35, 2022.71)

Age < 65 Male

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

60

31(31, 31)

69(50, 94)

2.21(1.61, 3.04)

Age < 65 Male

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

60

5(5, 5)

36(24, 55)

7.22(4.77, 10.93)

Age < 65 Male

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

60

5(5, 5)

110(67, 182)

22.05(13.37, 36.36)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

187

10(10, 10)

310782(220797, 437440)

31078.22(22079.74, 43743.98)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

187

10(10, 10)

734157(572734, 941076)

73264.41(57153.87, 93916.18)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

187

10(10, 10)

1788737(1432560, 2233471)

178873.74(143256.04, 223347.07)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

187

31(31, 31)

1261(931, 1708)

40.58(29.96, 54.96)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

187

5(5, 5)

1531(1064, 2203)

305.50(212.34, 439.54)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

187

5(5, 5)

2351(1629, 3394)

451.14(312.78, 650.70)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

68

10(10, 10)

646934(353933, 1182493)

64693.43(35393.35, 118249.33)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

68

10(10, 10)

2168221(1503263, 3127319)

216822.12(150326.29, 312731.92)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

68

10(10, 10)

5253653(3964058, 6962780)

525365.28(396405.83, 696278.04)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

68

31(31, 31)

3812(2592, 5607)

122.65(83.39, 180.40)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

68

5(5, 5)

3682(1837, 7380)

731.62(365.35, 1465.06)

Age < 65 Male

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

68

5(5, 5)

5840(2775, 12288)

1167.96(555.06, 2457.62)

Age < 65 Male

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

34

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Male

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

34

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Male

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

34

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Male

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

34

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 Male

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

34

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age < 65 Male

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

34

5(5, 6)

5(5, 5)

0.97(0.91, 1.03)

Age < 65 Male

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

60

10(10, 10)

123721(71099, 215288)

12372.07(7109.93, 21528.78)

Age < 65 Male

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

60

10(10, 10)

337499(211581, 538355)

33749.93(21158.10, 53835.54)

Age < 65 Male

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

60

10(10, 10)

425662(283055, 640116)

42566.19(28305.51, 64011.58)

Age < 65 Male

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

60

31(31, 31)

486(294, 804)

15.64(9.46, 25.86)

Age < 65 Male

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

60

5(5, 5)

283(159, 504)

56.62(31.80, 100.82)

Age < 65 Male

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

60

5(5, 5)

1458(885, 2399)

291.52(177.10, 479.85)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

266

10(10, 10)

67487(54656, 83329)

6748.67(5465.63, 8332.91)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

266

10(10, 10)

73151(60529, 88405)

7315.10(6052.90, 8840.50)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

266

10(10, 10)

135051(115339, 158132)

13505.15(11533.95, 15813.23)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

266

31(31, 31)

254(207, 311)

8.17(6.68, 10.00)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

266

5(5, 5)

278(223, 346)

55.18(44.26, 68.80)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

266

5(5, 5)

434(347, 543)

86.07(68.77, 107.73)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

72

10(10, 10)

93762(63053, 139429)

9376.25(6305.31, 13942.86)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

10(10, 10)

99994(73999, 135122)

9999.43(7399.88, 13512.20)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

10(10, 10)

212260(167267, 269355)

21225.95(16726.68, 26935.48)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

72

31(31, 31)

454(323, 639)

14.61(10.38, 20.56)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

72

5(5, 5)

387(259, 577)

77.31(51.82, 115.34)

Age >= 65 Female

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

72

5(5, 5)

704(481, 1030)

140.73(96.11, 206.08)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

40

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

40

10(10, 10)

10(10, 11)

1.02(0.98, 1.06)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

40

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

40

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

40

5(5, 5)

5(5, 5)

1.02(0.98, 1.07)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

40

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

60

10(10, 10)

25075(15874, 39610)

2507.52(1587.38, 3961.03)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

60

10(10, 10)

38154(27521, 52895)

3815.40(2752.11, 5289.48)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

60

10(10, 11)

44708(34466, 57994)

4385.81(3402.89, 5652.64)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

60

31(31, 31)

113(81, 157)

3.62(2.60, 5.04)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

60

5(5, 5)

104(68, 159)

20.48(13.39, 31.32)

Age >= 65 Female

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

60

5(5, 5)

179(120, 268)

35.84(24.01, 53.50)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

266

10(10, 10)

1097274(851584, 1413848)

109727.41(85158.42, 141384.79)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

266

10(10, 10)

3156766(2580313, 3862000)

315676.57(258031.34, 386199.98)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

266

10(10, 10)

6297614(5350848, 7411898)

629761.40(535084.85, 741189.79)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

266

31(31, 31)

2786(2191, 3543)

89.64(70.49, 113.99)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

266

5(5, 5)

5321(4036, 7016)

1055.86(800.46, 1392.75)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

266

5(5, 5)

6315(4804, 8301)

1252.60(953.33, 1645.82)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

72

10(10, 10)

3169036(2144423, 4683211)

316903.56(214442.32, 468321.13)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

72

10(10, 10)

6713448(5202553, 8663129)

671344.83(520255.30, 866312.89)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

72

10(10, 10)

14093295(12598095, 15765954)

1409329.54(1259809.46, 1576595.36)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

72

31(31, 31)

7521(5707, 9910)

241.99(183.64, 318.87)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

72

5(5, 5)

20148(11972, 33907)

4029.59(2394.40, 6781.47)

Age >= 65 Female

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

72

5(5, 5)

22089(14149, 34485)

4417.82(2829.84, 6896.92)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

40

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

40

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

40

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

40

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

40

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

40

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

60

10(10, 10)

409910(257632, 652197)

40991.04(25763.17, 65219.65)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

60

10(10, 10)

1571516(1075941, 2295351)

157151.55(107594.05, 229535.09)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

60

10(10, 11)

2270459(1617907, 3186205)

222728.56(159168.94, 311668.91)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

60

31(31, 31)

1636(1014, 2639)

52.64(32.63, 84.91)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

60

5(5, 5)

1992(1103, 3599)

392.28(218.24, 705.13)

Age >= 65 Female

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

60

5(5, 5)

3037(1821, 5064)

607.35(364.23, 1012.76)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

206

10(10, 10)

57987(45655, 73648)

5798.65(4565.53, 7364.83)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

206

10(10, 10)

69276(56159, 85458)

6927.63(5615.87, 8545.79)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

206

10(10, 10)

118317(98129, 142658)

11831.67(9812.85, 14265.82)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

206

31(31, 31)

259(205, 326)

8.33(6.61, 10.50)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

206

5(5, 5)

276(216, 351)

54.40(42.75, 69.21)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

206

5(5, 5)

463(360, 595)

91.42(71.12, 117.51)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

56

10(10, 10)

115818(71017, 188880)

11581.77(7101.75, 18887.95)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

10(10, 10)

119141(80977, 175292)

11914.08(8097.66, 17529.19)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

10(10, 10)

247139(179079, 341065)

24713.89(17907.93, 34106.47)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

56

31(31, 31)

423(270, 662)

13.60(8.68, 21.31)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

56

5(5, 5)

516(333, 799)

103.11(66.51, 159.85)

Age >= 65 Male

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

56

5(5, 5)

899(572, 1413)

179.79(114.41, 282.53)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

36

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

36

5(5, 5)

5(5, 5)

1.00(0.93, 1.08)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

36

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

61

10(10, 10)

40150(25517, 63173)

4014.99(2551.75, 6317.28)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

61

10(10, 10)

39910(26711, 59631)

3990.98(2671.06, 5963.14)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

61

10(10, 10)

60548(45961, 79765)

6054.83(4596.10, 7976.54)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

61

31(31, 31)

214(142, 322)

6.89(4.58, 10.36)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

61

5(5, 5)

171(110, 266)

33.15(21.51, 51.09)

Age >= 65 Male

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

61

5(5, 5)

416(257, 673)

83.19(51.38, 134.67)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

206

10(10, 10)

1045477(782982, 1395974)

104547.69(78298.17, 139597.39)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

206

10(10, 10)

2922278(2336145, 3655469)

292227.75(233614.54, 365546.85)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

206

10(10, 10)

5586775(4531616, 6887621)

558677.50(453161.61, 688762.11)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

206

31(31, 31)

3204(2519, 4077)

103.10(81.04, 131.17)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

206

5(5, 5)

4630(3361, 6377)

913.74(662.82, 1259.65)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

206

5(5, 5)

6275(4603, 8555)

1239.46(911.44, 1685.54)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

56

10(10, 10)

2506469(1521534, 4128984)

250646.95(152153.40, 412898.38)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

10(10, 10)

6702157(4808091, 9342358)

670215.69(480809.11, 934235.79)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

10(10, 10)

12073936(9223667, 15804987)

1207393.64(922366.72, 1580498.69)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

56

31(31, 31)

5714(3618, 9024)

183.84(116.40, 290.34)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

56

5(5, 5)

15785(7993, 31174)

3156.95(1598.53, 6234.71)

Age >= 65 Male

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

56

5(5, 5)

21269(11638, 38869)

4253.74(2327.63, 7773.72)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

36

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

36

5(5, 5)

5(5, 5)

0.97(0.92, 1.03)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

36

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

61

10(10, 10)

687405(426013, 1109182)

68740.51(42601.29, 110918.18)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

61

10(10, 10)

1683254(1149840, 2464121)

168325.42(114983.98, 246412.12)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

61

10(10, 10)

3081458(2351502, 4038007)

308145.76(235150.20, 403800.66)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

61

31(31, 31)

1751(1083, 2831)

56.34(34.85, 91.10)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

61

5(5, 5)

2577(1485, 4473)

499.75(290.09, 860.91)

Age >= 65 Male

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

61

5(5, 5)

3976(2223, 7112)

795.17(444.51, 1422.44)

Table 6g. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Hispanic or Latino ethnicity

Group

Visit

Arm

Baseline COVID

Marker

N

Baseline GMT/GMC

Post Baseline GMT/GMC

GMTR/GMCR

Hispanic or Latino ethnicity

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

112

10(10, 10)

17300(10454, 28630)

1730.01(1045.38, 2862.99)

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

112

10(10, 10)

21079(13535, 32828)

2107.94(1353.54, 3282.80)

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

112

10(10, 10)

41454(27925, 61537)

4145.39(2792.51, 6153.70)

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

112

31(31, 31)

105(77, 143)

3.38(2.48, 4.61)

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

112

5(5, 5)

77(49, 122)

15.38(9.72, 24.34)

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

112

5(5, 6)

159(105, 241)

28.95(18.47, 45.39)

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

38

10(10, 10)

42228(22471, 79357)

4222.84(2247.10, 7935.73)

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

38

10(10, 10)

50892(30166, 85856)

5089.16(3016.63, 8585.59)

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

38

10(10, 10)

85084(58117, 124565)

8508.42(5811.70, 12456.46)

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

38

31(31, 31)

281(151, 524)

9.04(4.85, 16.87)

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

38

5(5, 5)

197(108, 362)

38.20(20.94, 69.68)

Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

38

5(5, 5)

351(193, 638)

70.10(38.51, 127.62)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

20

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

20

10(10, 10)

10(10, 11)

1.02(0.98, 1.05)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

20

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

20

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

20

5(5, 5)

5(5, 5)

1.02(0.98, 1.06)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

20

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

45

10(10, 10)

15333(8092, 29052)

1533.27(809.21, 2905.18)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

45

10(10, 10)

14454(8294, 25189)

1445.45(829.45, 2518.93)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

45

10(10, 10)

22217(16404, 30091)

2221.75(1640.43, 3009.06)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

45

31(31, 31)

69(49, 96)

2.21(1.59, 3.08)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

45

5(5, 5)

55(30, 101)

10.82(5.84, 20.05)

Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

45

5(5, 5)

141(84, 236)

28.11(16.77, 47.11)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

112

10(10, 10)

328439(166727, 646999)

32843.92(16672.71, 64699.94)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

112

10(10, 10)

862213(552408, 1345763)

86221.27(55240.83, 134576.31)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

112

10(10, 10)

2101292(1544642, 2858545)

210129.19(154464.18, 285854.46)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

112

31(31, 31)

1167(732, 1862)

37.56(23.54, 59.92)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

112

5(5, 5)

1893(1142, 3138)

378.63(228.41, 627.66)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

112

5(5, 6)

1726(1067, 2792)

313.92(193.17, 510.18)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

38

10(10, 10)

1195899(552115, 2590357)

119589.95(55211.53, 259035.67)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

38

10(10, 10)

4778590(2571795, 8878980)

477858.96(257179.52, 887898.02)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

38

10(10, 10)

7316965(4930528, 10858466)

731696.48(493052.83, 1085846.61)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

38

31(31, 31)

2840(1447, 5575)

91.39(46.56, 179.39)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

38

5(5, 5)

6497(2827, 14932)

1257.79(549.76, 2877.69)

Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

38

5(5, 5)

7944(3075, 20525)

1588.78(614.92, 4104.97)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

20

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

20

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

20

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

20

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

20

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

20

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

45

10(10, 10)

104344(59705, 182357)

10434.38(5970.50, 18235.71)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

45

10(10, 10)

463502(275148, 780794)

46350.17(27514.79, 78079.38)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

45

10(10, 10)

787311(464021, 1335841)

78731.09(46402.11, 133584.12)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

45

31(31, 31)

620(316, 1216)

19.93(10.15, 39.14)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

45

5(5, 5)

668(366, 1221)

132.02(72.44, 240.58)

Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

45

5(5, 5)

1601(840, 3053)

320.26(167.96, 610.66)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

723

10(10, 10)

24177(20485, 28533)

2417.68(2048.55, 2853.32)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

723

10(10, 10)

25435(21965, 29454)

2531.44(2185.65, 2931.94)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

723

10(10, 10)

46892(41468, 53025)

4689.22(4146.83, 5302.55)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

723

31(31, 31)

154(134, 178)

4.96(4.31, 5.72)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

723

5(5, 5)

107(91, 126)

21.06(17.90, 24.78)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

723

5(5, 5)

214(181, 254)

42.27(35.66, 50.09)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

208

10(10, 10)

41958(29839, 59000)

4195.84(2983.89, 5900.05)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

208

10(10, 10)

39610(29152, 53820)

3961.01(2915.22, 5381.96)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

208

10(10, 10)

81834(63759, 105035)

8183.45(6375.88, 10503.46)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

208

31(31, 31)

195(148, 257)

6.27(4.76, 8.27)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

208

5(5, 5)

179(131, 246)

35.42(25.62, 48.98)

Not Hispanic or Latino

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

208

5(5, 5)

337(240, 473)

67.34(47.94, 94.59)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

119

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

119

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

119

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

119

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

119

5(5, 5)

5(5, 5)

1.02(0.98, 1.05)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

119

5(5, 5)

5(5, 6)

1.03(0.97, 1.10)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

198

10(10, 10)

12616(9255, 17197)

1261.59(925.53, 1719.68)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

198

10(10, 10)

12153(9187, 16078)

1215.34(918.71, 1607.75)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

198

10(10, 10)

18891(15084, 23659)

1884.35(1504.75, 2359.71)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

198

31(31, 31)

94(72, 122)

3.01(2.32, 3.91)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

198

5(5, 5)

52(38, 69)

9.96(7.45, 13.31)

Not Hispanic or Latino

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

198

5(5, 5)

148(105, 210)

29.69(20.99, 42.01)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

723

10(10, 10)

394932(324377, 480834)

39493.23(32437.73, 48083.37)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

723

10(10, 10)

1095375(939605, 1276970)

109017.26(93472.01, 127147.81)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

723

10(10, 10)

2286047(2004495, 2607145)

228604.67(200449.53, 260714.48)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

723

31(31, 31)

1517(1264, 1820)

48.81(40.67, 58.57)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

723

5(5, 5)

1811(1469, 2233)

356.61(289.68, 439.01)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

723

5(5, 5)

3149(2585, 3836)

621.12(510.08, 756.33)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

208

10(10, 10)

852459(581610, 1249440)

85245.95(58161.02, 124944.03)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

208

10(10, 10)

2596583(1969141, 3423951)

259658.32(196914.13, 342395.14)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

208

10(10, 10)

5437290(4395135, 6726555)

543729.00(439513.55, 672655.54)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

208

31(31, 31)

4027(3047, 5323)

129.58(98.03, 171.27)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

208

5(5, 5)

4552(3211, 6453)

898.76(631.42, 1279.29)

Not Hispanic or Latino

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

208

5(5, 5)

7701(5217, 11368)

1540.19(1043.35, 2273.63)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

119

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

119

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

119

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

119

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

119

5(5, 5)

5(5, 5)

1.02(0.97, 1.06)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

119

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

198

10(10, 10)

179380(122975, 261655)

17937.99(12297.54, 26165.52)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

198

10(10, 10)

495267(355781, 689438)

49526.67(35578.14, 68943.77)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

198

10(10, 10)

705202(543308, 915337)

70342.56(54195.74, 91300.09)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

198

31(31, 31)

676(475, 960)

21.74(15.30, 30.89)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

198

5(5, 5)

590(389, 894)

114.01(75.35, 172.50)

Not Hispanic or Latino

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

198

5(5, 5)

2116(1483, 3019)

423.15(296.51, 603.87)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

69

10(10, 10)

34658(19186, 62605)

3465.77(1918.63, 6260.49)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

69

10(10, 10)

22176(11878, 41401)

2217.59(1187.81, 4140.15)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

69

10(10, 10)

45320(27868, 73702)

4532.03(2786.80, 7370.18)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

69

31(31, 31)

158(94, 265)

5.08(3.03, 8.51)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

69

5(5, 5)

134(73, 246)

26.64(14.54, 48.81)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

69

5(5, 5)

338(183, 623)

67.53(36.60, 124.61)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

27

10(10, 10)

20686(6988, 61228)

2068.56(698.85, 6122.83)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

27

10(10, 10)

35351(13700, 91220)

3535.10(1369.97, 9122.03)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

27

10(10, 10)

66488(32772, 134894)

6648.83(3277.16, 13489.38)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

27

31(31, 31)

251(91, 691)

8.08(2.94, 22.24)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

27

5(5, 5)

114(44, 291)

22.73(8.88, 58.21)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

27

5(5, 5)

325(171, 618)

65.05(34.21, 123.67)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

16

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

16

5(5, 5)

5(5, 5)

0.98(0.94, 1.02)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

16

6(5, 8)

5(5, 5)

0.83(0.64, 1.07)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

27

10(10, 10)

7772(4079, 14808)

777.19(407.90, 1480.83)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

27

10(10, 10)

8558(4244, 17258)

855.77(424.35, 1725.81)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

27

10(10, 10)

10833(6651, 17645)

1083.27(665.07, 1764.46)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

27

31(31, 31)

75(50, 112)

2.41(1.62, 3.59)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

27

5(5, 5)

43(22, 84)

8.60(4.40, 16.83)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

27

5(5, 5)

175(112, 273)

35.02(22.49, 54.53)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

69

10(10, 10)

597128(295020, 1208602)

59712.85(29502.05, 120860.23)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

69

10(10, 10)

1092114(647550, 1841889)

109211.45(64754.95, 184188.86)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

69

10(10, 10)

3502950(2226723, 5510633)

350294.96(222672.34, 551063.31)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

69

31(31, 31)

1275(666, 2440)

41.01(21.42, 78.52)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

69

5(5, 5)

1432(816, 2511)

284.49(162.15, 499.14)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

69

5(5, 5)

2063(1034, 4116)

412.69(206.89, 823.22)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

27

10(10, 10)

619511(172443, 2225627)

61951.08(17244.29, 222562.71)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

27

10(10, 10)

1692544(915839, 3127957)

169254.43(91583.94, 312795.69)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

27

10(10, 10)

6969464(3826723, 12693217)

696946.36(382672.27, 1269321.72)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

27

31(31, 31)

3795(2170, 6636)

122.10(69.83, 213.50)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

27

5(5, 5)

4420(597, 32740)

883.97(119.33, 6547.99)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

27

5(5, 5)

8420(1347, 52622)

1684.08(269.48, 10524.39)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

16

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

16

5(5, 5)

5(5, 5)

0.98(0.94, 1.02)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

16

6(5, 8)

5(5, 5)

0.83(0.64, 1.07)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

27

10(10, 10)

70375(24874, 199106)

7037.45(2487.40, 19910.60)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

27

10(10, 10)

292258(179012, 477144)

29225.76(17901.21, 47714.36)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

27

10(10, 10)

783961(452126, 1359342)

78396.06(45212.63, 135934.18)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

27

31(31, 31)

245(127, 475)

7.89(4.08, 15.29)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

27

5(5, 5)

176(48, 641)

35.18(9.65, 128.19)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

27

5(5, 5)

461(203, 1046)

92.17(40.59, 209.29)

Table 6h. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Race

Group

Visit

Arm

Baseline COVID

Marker

N

Baseline GMT/GMC

Post Baseline GMT/GMC

GMTR/GMCR

Race

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

82

10(10, 10)

24610(15149, 39981)

2461.03(1514.89, 3998.07)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

82

10(10, 10)

22547(15267, 33299)

2239.01(1513.53, 3312.24)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

82

10(10, 10)

51778(36398, 73657)

5177.78(3639.77, 7365.68)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

82

31(31, 31)

158(99, 250)

5.08(3.20, 8.06)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

82

5(5, 5)

97(58, 160)

19.22(11.60, 31.84)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

82

5(5, 5)

243(137, 430)

47.04(26.03, 85.00)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

29

10(10, 10)

75957(23758, 242847)

7595.70(2375.76, 24284.71)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

29

10(10, 10)

44054(21318, 91038)

4405.38(2131.78, 9103.81)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

29

10(10, 10)

120107(62445, 231015)

12010.74(6244.51, 23101.54)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

29

31(31, 31)

298(101, 878)

9.60(3.26, 28.24)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

29

5(5, 5)

252(84, 758)

50.48(16.81, 151.62)

Not reported and unknown

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

29

5(5, 5)

604(185, 1970)

120.71(36.98, 394.03)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

16

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

16

5(5, 5)

5(5, 5)

1.03(0.97, 1.09)

Not reported and unknown

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

16

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

19

10(10, 10)

10622(4164, 27094)

1062.22(416.45, 2709.37)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

19

10(10, 10)

13429(6000, 30056)

1342.93(600.03, 3005.63)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

19

10(10, 10)

16476(9120, 29764)

1647.59(912.04, 2976.37)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

19

31(31, 31)

86(38, 193)

2.77(1.23, 6.22)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

19

5(5, 5)

42(15, 113)

8.32(3.07, 22.56)

Not reported and unknown

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

19

5(5, 5)

116(47, 290)

23.30(9.37, 57.93)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

82

10(10, 10)

387128(206168, 726921)

38712.79(20616.82, 72692.14)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

82

10(10, 10)

1167497(716317, 1902856)

115936.58(71110.61, 189019.50)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

82

10(10, 10)

1960249(1372043, 2800623)

196024.89(137204.33, 280062.29)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

82

31(31, 31)

1799(1041, 3109)

57.88(33.48, 100.04)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

82

5(5, 5)

2208(1195, 4078)

438.93(237.88, 809.88)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

82

5(5, 5)

3960(2197, 7137)

767.52(424.91, 1386.38)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

29

10(10, 10)

980068(328589, 2923205)

98006.81(32858.92, 292320.51)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

29

10(10, 10)

3822630(2163704, 6753466)

382262.99(216370.38, 675346.57)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

29

10(10, 10)

6278608(4069304, 9687386)

627860.84(406930.44, 968738.64)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

29

31(31, 31)

3409(1667, 6972)

109.69(53.64, 224.33)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

29

5(5, 5)

6522(2727, 15595)

1304.33(545.46, 3118.99)

Not reported and unknown

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

29

5(5, 5)

4981(1359, 18256)

996.22(271.82, 3651.18)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

16

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

16

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

16

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Not reported and unknown

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

16

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

19

10(10, 10)

305832(116917, 799995)

30583.21(11691.73, 79999.49)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

19

10(10, 10)

429224(135857, 1356088)

42922.45(13585.67, 135608.79)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

19

10(10, 10)

596294(284192, 1251148)

59629.40(28419.23, 125114.79)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

19

31(31, 31)

568(274, 1179)

18.28(8.81, 37.92)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

19

5(5, 5)

1251(432, 3620)

250.21(86.47, 723.99)

Not reported and unknown

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

19

5(5, 5)

1457(397, 5346)

291.50(79.47, 1069.20)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

23

10(10, 10)

15408(4857, 48884)

1540.81(485.66, 4888.41)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

23

10(10, 10)

14839(5964, 36923)

1483.91(596.36, 3692.35)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

23

10(10, 10)

44194(23071, 84657)

4419.38(2307.05, 8465.73)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

23

31(31, 31)

90(51, 159)

2.88(1.62, 5.12)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

23

5(5, 5)

99(32, 304)

19.74(6.41, 60.82)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

23

5(5, 5)

154(59, 403)

30.41(11.69, 79.09)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

8

10(10, 10)

78224(55105, 111043)

7822.39(5510.46, 11104.29)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

8

10(10, 10)

58608(16589, 207061)

5860.78(1658.87, 20706.06)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

8

10(10, 10)

107648(28095, 412463)

10764.79(2809.48, 41246.31)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

8

31(31, 31)

202(109, 375)

6.51(3.52, 12.06)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

8

5(5, 5)

174(61, 501)

34.88(12.14, 100.21)

American Indian or Alaska Native

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

8

5(5, 5)

236(105, 532)

47.22(20.95, 106.41)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

4

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

4

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

4

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

4

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

4

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

4

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

9

10(10, 10)

12456(5794, 26780)

1245.64(579.40, 2677.98)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

9

10(10, 10)

46485(22855, 94544)

4648.49(2285.54, 9454.42)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

9

10(10, 10)

37459(16293, 86119)

3745.87(1629.32, 8611.87)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

9

31(31, 31)

103(37, 288)

3.33(1.19, 9.27)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

9

5(5, 5)

60(25, 144)

12.00(5.01, 28.74)

American Indian or Alaska Native

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

9

5(5, 5)

220(76, 632)

43.98(15.29, 126.48)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

23

10(10, 10)

269388(132372, 548224)

26938.75(13237.22, 54822.40)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

23

10(10, 10)

861285(401178, 1849081)

86128.46(40117.84, 184908.06)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

23

10(10, 10)

1815698(747717, 4409102)

181569.78(74771.65, 440910.24)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

23

31(31, 31)

1811(811, 4044)

58.27(26.10, 130.11)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

23

5(5, 5)

3102(640, 15045)

620.39(127.92, 3008.91)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

23

5(5, 5)

2868(1187, 6929)

565.75(234.61, 1364.28)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

8

10(10, 10)

2756615(1542509, 4926340)

275661.48(154250.93, 492634.01)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

8

10(10, 10)

2032105(811229, 5090361)

203210.49(81122.93, 509036.11)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

8

10(10, 10)

8967133(5231738, 15369551)

896713.25(523173.81, 1536955.09)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

8

31(31, 31)

4607(1730, 12270)

148.24(55.67, 394.79)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

8

5(5, 5)

3665(1344, 9992)

732.91(268.79, 1998.39)

American Indian or Alaska Native

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

8

5(5, 5)

8346(2020, 34489)

1669.28(403.97, 6897.83)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

4

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

4

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

4

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

4

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

4

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

4

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

9

10(10, 10)

547461(240136, 1248096)

54746.06(24013.63, 124809.59)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

9

10(10, 10)

856369(277258, 2645067)

85636.86(27725.84, 264506.72)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

9

10(10, 10)

2644241(1400124, 4993848)

264424.05(140012.43, 499384.81)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

9

31(31, 31)

845(187, 3813)

27.17(6.02, 122.70)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

9

5(5, 5)

2177(380, 12461)

435.42(76.08, 2492.15)

American Indian or Alaska Native

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

9

5(5, 5)

2973(621, 14241)

594.70(124.17, 2848.24)

Asian

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

72

10(10, 10)

29058(15721, 53708)

2905.76(1572.08, 5370.85)

Asian

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

72

10(10, 10)

22450(13872, 36333)

2245.03(1387.21, 3633.33)

Asian

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

72

10(10, 10)

39381(27210, 56994)

3938.06(2721.03, 5699.44)

Asian

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

72

31(31, 31)

152(96, 240)

4.89(3.09, 7.72)

Asian

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

72

5(5, 6)

122(76, 198)

22.96(14.66, 35.97)

Asian

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

72

5(5, 5)

256(166, 395)

51.29(33.28, 79.05)

Asian

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

24

10(10, 10)

16585(8330, 33019)

1658.46(833.01, 3301.90)

Asian

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

24

10(10, 10)

14666(7029, 30602)

1466.61(702.87, 3060.24)

Asian

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

24

10(10, 10)

53491(32372, 88389)

5349.12(3237.19, 8838.86)

Asian

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

24

31(31, 31)

129(69, 244)

4.17(2.21, 7.85)

Asian

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

24

5(5, 5)

85(40, 181)

17.05(8.01, 36.29)

Asian

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

24

5(5, 5)

179(82, 390)

35.82(16.43, 78.07)

Asian

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Asian

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Asian

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Asian

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Asian

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Asian

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

11

6(4, 9)

5(5, 5)

0.82(0.56, 1.21)

Asian

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

22

10(10, 10)

11667(5557, 24498)

1166.74(555.66, 2449.84)

Asian

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

22

10(10, 10)

11101(5005, 24621)

1110.11(500.53, 2462.07)

Asian

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

22

10(10, 10)

26745(13630, 52477)

2674.47(1363.02, 5247.75)

Asian

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

22

31(31, 31)

110(70, 173)

3.55(2.26, 5.58)

Asian

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

22

5(5, 5)

62(32, 120)

12.36(6.38, 23.94)

Asian

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

22

5(5, 5)

121(55, 263)

24.14(11.09, 52.54)

Asian

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

72

10(10, 10)

307565(168372, 561829)

30756.53(16837.23, 56182.86)

Asian

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

72

10(10, 10)

617613(396254, 962628)

61761.25(39625.40, 96262.81)

Asian

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

72

10(10, 10)

2147277(1387913, 3322108)

214727.67(138791.31, 332210.80)

Asian

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

72

31(31, 31)

1291(832, 2005)

41.55(26.76, 64.51)

Asian

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

72

5(5, 6)

3063(1452, 6462)

574.38(270.39, 1220.14)

Asian

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

72

5(5, 5)

2894(1728, 4846)

578.71(345.54, 969.24)

Asian

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

24

10(10, 10)

325313(148009, 715011)

32531.25(14800.92, 71501.09)

Asian

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

24

10(10, 10)

943716(450508, 1976875)

94371.56(45050.84, 197687.55)

Asian

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

24

10(10, 10)

3260154(1620445, 6559065)

326015.37(162044.47, 655906.51)

Asian

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

24

31(31, 31)

980(435, 2206)

31.54(14.01, 70.99)

Asian

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

24

5(5, 5)

2875(1184, 6978)

574.95(236.87, 1395.57)

Asian

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

24

5(5, 5)

2370(966, 5815)

474.03(193.22, 1162.96)

Asian

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Asian

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Asian

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Asian

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Asian

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Asian

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

11

6(4, 9)

5(5, 5)

0.82(0.56, 1.21)

Asian

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

22

10(10, 10)

145809(38658, 549949)

14580.87(3865.85, 54994.89)

Asian

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

22

10(10, 10)

316157(113382, 881584)

31615.74(11338.17, 88158.41)

Asian

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

22

10(10, 10)

923976(318284, 2682299)

92397.61(31828.36, 268229.93)

Asian

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

22

31(31, 31)

981(274, 3519)

31.57(8.80, 113.21)

Asian

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

22

5(5, 5)

688(248, 1912)

137.66(49.56, 382.37)

Asian

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

22

5(5, 5)

2529(953, 6713)

505.78(190.54, 1342.60)

Black or African American

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

186

10(10, 10)

18990(12929, 27893)

1899.03(1292.90, 2789.31)

Black or African American

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

186

10(10, 10)

21364(15843, 28809)

2136.40(1584.27, 2880.95)

Black or African American

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

186

10(10, 10)

37502(28190, 49890)

3750.22(2819.01, 4989.03)

Black or African American

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

186

31(31, 31)

127(94, 170)

4.07(3.03, 5.47)

Black or African American

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

186

5(5, 5)

92(63, 136)

18.42(12.51, 27.11)

Black or African American

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

186

5(5, 5)

179(125, 258)

34.25(23.74, 49.43)

Black or African American

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

37

10(10, 10)

51767(20122, 133180)

5176.68(2012.17, 13317.99)

Black or African American

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

37

10(10, 10)

54759(28695, 104499)

5475.93(2869.48, 10449.90)

Black or African American

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

37

10(10, 10)

73291(52215, 102875)

7329.11(5221.48, 10287.48)

Black or African American

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

37

31(31, 31)

246(117, 516)

7.91(3.76, 16.61)

Black or African American

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

37

5(5, 5)

201(81, 499)

40.15(16.14, 99.89)

Black or African American

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

37

5(5, 5)

453(214, 958)

90.59(42.85, 191.54)

Black or African American

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Black or African American

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.01(0.99, 1.04)

Black or African American

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Black or African American

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Black or African American

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

5(5, 5)

1.01(0.99, 1.04)

Black or African American

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Black or African American

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

54

10(10, 10)

9552(5420, 16835)

955.19(541.95, 1683.52)

Black or African American

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

54

10(10, 10)

11200(6788, 18481)

1120.04(678.78, 1848.14)

Black or African American

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

54

10(10, 10)

13590(8763, 21075)

1358.98(876.32, 2107.48)

Black or African American

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

54

31(31, 31)

92(64, 133)

2.96(2.04, 4.29)

Black or African American

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

54

5(5, 6)

43(25, 73)

7.98(4.91, 12.99)

Black or African American

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

54

5(5, 5)

130(79, 213)

25.96(15.81, 42.62)

Black or African American

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

186

10(10, 10)

283002(180902, 442728)

28300.21(18090.15, 44272.82)

Black or African American

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

186

10(10, 10)

995774(693820, 1429141)

99577.44(69382.00, 142914.11)

Black or African American

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

186

10(10, 10)

2062946(1559082, 2729650)

206294.64(155908.18, 272965.00)

Black or African American

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

186

31(31, 31)

1227(833, 1808)

39.48(26.79, 58.18)

Black or African American

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

186

5(5, 5)

1431(861, 2379)

285.73(171.88, 475.01)

Black or African American

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

186

5(5, 5)

2295(1526, 3452)

438.74(290.52, 662.56)

Black or African American

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

37

10(10, 10)

822664(316585, 2137736)

82266.37(31658.51, 213773.64)

Black or African American

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

37

10(10, 10)

2748160(1372832, 5501318)

274816.00(137283.17, 550131.78)

Black or African American

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

37

10(10, 10)

5781344(3814342, 8762699)

578134.36(381434.24, 876269.89)

Black or African American

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

37

31(31, 31)

4962(2890, 8519)

159.64(92.98, 274.09)

Black or African American

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

37

5(5, 5)

7120(2965, 17098)

1424.07(593.03, 3419.70)

Black or African American

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

37

5(5, 5)

6766(2257, 20287)

1353.26(451.34, 4057.47)

Black or African American

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Black or African American

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Black or African American

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Black or African American

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Black or African American

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Black or African American

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Black or African American

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

54

10(10, 10)

177236(97660, 321654)

17723.61(9765.97, 32165.39)

Black or African American

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

54

10(10, 10)

432189(275879, 677063)

43218.88(27587.88, 67706.25)

Black or African American

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

54

10(10, 10)

538343(309150, 937450)

53834.26(30915.01, 93744.99)

Black or African American

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

54

31(31, 31)

656(334, 1288)

21.10(10.74, 41.43)

Black or African American

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

54

5(5, 6)

499(255, 976)

92.85(49.86, 172.89)

Black or African American

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

54

5(5, 5)

1783(970, 3278)

356.57(193.96, 655.54)

Multiracial

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

50

10(10, 10)

15030(7688, 29387)

1503.05(768.77, 2938.65)

Multiracial

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

50

10(10, 10)

16146(8126, 32079)

1614.57(812.62, 3207.93)

Multiracial

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

50

10(10, 10)

35276(22869, 54413)

3527.57(2286.91, 5441.28)

Multiracial

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

50

31(31, 31)

150(77, 290)

4.82(2.49, 9.34)

Multiracial

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

50

5(5, 5)

64(34, 122)

12.78(6.72, 24.31)

Multiracial

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

50

5(5, 6)

219(102, 470)

41.60(19.21, 90.11)

Multiracial

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

16

10(10, 10)

51133(20521, 127407)

5113.27(2052.12, 12740.74)

Multiracial

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

16

10(10, 10)

58635(23706, 145028)

5863.49(2370.61, 14502.79)

Multiracial

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

16

10(10, 10)

88368(51569, 151425)

8836.75(5156.88, 15142.54)

Multiracial

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

16

31(31, 31)

462(158, 1353)

14.86(5.07, 43.52)

Multiracial

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

16

5(5, 6)

186(87, 399)

35.59(16.94, 74.76)

Multiracial

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

16

5(5, 5)

598(283, 1263)

119.62(56.63, 252.68)

Multiracial

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

12

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Multiracial

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

12

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Multiracial

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

12

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Multiracial

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

12

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Multiracial

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

12

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Multiracial

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

12

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Multiracial

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

12

10(10, 10)

31749(8579, 117498)

3174.92(857.90, 11749.82)

Multiracial

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

12

10(10, 10)

19083(4166, 87413)

1908.30(416.60, 8741.29)

Multiracial

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

12

10(10, 10)

19160(9716, 37784)

1915.99(971.59, 3778.35)

Multiracial

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

12

31(31, 31)

64(40, 102)

2.05(1.29, 3.27)

Multiracial

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

12

5(5, 5)

97(22, 436)

19.37(4.30, 87.19)

Multiracial

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

12

5(5, 5)

160(55, 471)

32.08(10.94, 94.12)

Multiracial

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

50

10(10, 10)

466712(202077, 1077906)

46671.18(20207.70, 107790.58)

Multiracial

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

50

10(10, 10)

818122(421874, 1586549)

81812.24(42187.44, 158654.86)

Multiracial

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

50

10(10, 10)

2097967(1343390, 3276386)

209796.69(134339.01, 327638.63)

Multiracial

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

50

31(31, 31)

924(500, 1707)

29.73(16.09, 54.94)

Multiracial

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

50

5(5, 5)

1471(701, 3087)

294.21(140.18, 617.48)

Multiracial

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

50

5(5, 6)

1290(765, 2177)

245.23(149.94, 401.07)

Multiracial

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

16

10(10, 10)

1668847(377763, 7372483)

166884.74(37776.30, 737248.35)

Multiracial

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

16

10(10, 10)

6098484(3170420, 11730783)

609848.39(317041.97, 1173078.31)

Multiracial

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

16

10(10, 10)

5861262(2842505, 12085955)

586126.21(284250.54, 1208595.52)

Multiracial

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

16

31(31, 31)

4476(1899, 10550)

144.02(61.10, 339.43)

Multiracial

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

16

5(5, 6)

5842(1516, 22508)

1116.87(295.99, 4214.37)

Multiracial

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

16

5(5, 5)

16918(4545, 62976)

3383.52(908.94, 12595.13)

Multiracial

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

12

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Multiracial

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

12

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Multiracial

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

12

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Multiracial

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

12

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Multiracial

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

12

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Multiracial

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

12

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Multiracial

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

12

10(10, 10)

153873(50478, 469057)

15387.34(5047.80, 46905.65)

Multiracial

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

12

10(10, 10)

540021(236744, 1231804)

54002.09(23674.42, 123180.45)

Multiracial

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

12

10(10, 10)

1133211(286887, 4476208)

113321.05(28688.70, 447620.83)

Multiracial

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

12

31(31, 31)

739(129, 4243)

23.78(4.14, 136.51)

Multiracial

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

12

5(5, 5)

359(93, 1385)

71.74(18.58, 277.04)

Multiracial

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

12

5(5, 5)

2683(1220, 5899)

536.57(244.05, 1179.73)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

17

10(10, 10)

30469(9953, 93276)

3046.94(995.30, 9327.65)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

17

10(10, 10)

38260(24141, 60638)

3826.03(2414.09, 6063.79)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

17

10(10, 10)

63341(31507, 127339)

6334.10(3150.71, 12733.91)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

17

31(31, 31)

308(104, 915)

9.91(3.34, 29.44)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

17

5(5, 6)

101(25, 405)

19.57(4.95, 77.39)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

17

6(4, 7)

536(164, 1746)

94.67(34.62, 258.90)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

3

10(10, 10)

47152(7608, 292233)

4715.20(760.80, 29223.29)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

3

10(10, 10)

102274(37430, 279459)

10227.43(3742.96, 27945.90)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

3

10(10, 10)

231295(106772, 501046)

23129.52(10677.16, 50104.58)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

3

31(31, 31)

350(303, 405)

11.27(9.74, 13.03)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

3

5(5, 5)

245(59, 1025)

49.08(11.75, 205.00)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

3

5(5, 5)

485(114, 2062)

97.02(22.83, 412.33)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

3

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

3

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

3

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

3

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

3

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

3

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

4

10(10, 10)

13410(4087, 44002)

1340.99(408.68, 4400.16)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

4

10(10, 10)

22863(14278, 36611)

2286.33(1427.78, 3661.13)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

4

10(10, 10)

42403(13314, 135042)

4240.26(1331.42, 13504.25)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

4

31(31, 31)

154(49, 480)

4.95(1.59, 15.45)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

4

5(5, 5)

81(42, 157)

16.25(8.41, 31.40)

Native Hawaiian or Other Pacific Islander

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

4

5(5, 5)

358(127, 1009)

71.55(25.37, 201.79)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

17

10(10, 10)

562315(172087, 1837426)

56231.46(17208.74, 183742.58)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

17

10(10, 10)

1192658(305252, 4659863)

119265.80(30525.21, 465986.27)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

17

10(10, 10)

3313635(1463742, 7501441)

331363.48(146374.22, 750144.08)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

17

31(31, 31)

3353(981, 11462)

107.87(31.55, 368.80)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

17

5(5, 6)

2324(888, 6084)

448.20(174.42, 1151.73)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

17

6(4, 7)

6669(2102, 21157)

1178.59(428.76, 3239.70)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

3

10(10, 10)

3863077(1998544, 7467116)

386307.67(199854.43, 746711.59)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

3

10(10, 10)

11446840(6255217, 20947338)

1144684.00(625521.72, 2094733.75)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

3

10(10, 10)

16830792(13086759, 21645968)

1683079.22(1308675.88, 2164596.82)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

3

31(31, 31)

18976(18976, 18976)

610.56(610.56, 610.56)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

3

5(5, 5)

12770(2673, 61015)

2554.05(534.56, 12203.02)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

3

5(5, 5)

94973(2487, 3627015)

18994.59(497.37, 725403.05)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

3

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

3

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

3

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

3

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

3

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

3

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

4

10(10, 10)

332587(138891, 796412)

33258.73(13889.09, 79641.16)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

4

10(10, 10)

972260(275170, 3435298)

97226.01(27516.96, 343529.83)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

4

10(10, 10)

975463(556759, 1709049)

97546.28(55675.86, 170904.89)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

4

31(31, 31)

1887(474, 7505)

60.71(15.26, 241.47)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

4

5(5, 5)

370(60, 2284)

74.09(12.02, 456.88)

Native Hawaiian or Other Pacific Islander

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

4

5(5, 5)

13837(3685, 51953)

2767.42(737.08, 10390.52)

Other

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

26

10(10, 10)

28296(9834, 81416)

2829.56(983.40, 8141.61)

Other

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

26

10(10, 10)

26949(14741, 49270)

2694.95(1474.07, 4927.00)

Other

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

26

10(10, 10)

39026(17100, 89070)

3902.64(1709.95, 8907.04)

Other

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

26

31(31, 31)

109(66, 179)

3.50(2.12, 5.77)

Other

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

26

5(5, 5)

126(55, 287)

25.22(11.08, 57.39)

Other

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

26

6(4, 8)

142(73, 275)

24.27(10.12, 58.24)

Other

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

12

10(10, 10)

41080(14172, 119079)

4107.99(1417.18, 11907.85)

Other

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

12

10(10, 10)

39608(19506, 80427)

3960.81(1950.59, 8042.67)

Other

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

12

10(10, 10)

102304(42388, 246909)

10230.38(4238.84, 24690.89)

Other

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

12

31(31, 31)

241(87, 666)

7.74(2.80, 21.42)

Other

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

12

5(5, 6)

297(119, 741)

57.18(22.91, 142.73)

Other

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

12

5(5, 5)

278(87, 886)

55.61(17.44, 177.28)

Other

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

2

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Other

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

2

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Other

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

2

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Other

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

2

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Other

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

2

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Other

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

2

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Other

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

12

10(10, 10)

6988(2755, 17724)

698.79(275.51, 1772.38)

Other

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

12

10(10, 10)

7530(5472, 10361)

752.97(547.23, 1036.06)

Other

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

12

10(10, 10)

18056(11387, 28630)

1805.60(1138.75, 2862.95)

Other

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

12

31(31, 31)

39(32, 48)

1.26(1.02, 1.55)

Other

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

12

5(5, 5)

28(14, 60)

5.70(2.72, 11.95)

Other

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

12

5(5, 5)

84(57, 123)

16.77(11.43, 24.62)

Other

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

26

10(10, 10)

222896(56894, 873241)

22289.56(5689.43, 87324.09)

Other

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

26

10(10, 10)

922733(412448, 2064349)

92273.30(41244.77, 206434.94)

Other

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

26

10(10, 10)

2362094(1084064, 5146827)

236209.40(108406.36, 514682.70)

Other

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

26

31(31, 31)

965(329, 2829)

31.05(10.59, 91.02)

Other

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

26

5(5, 5)

1949(729, 5208)

389.82(145.88, 1041.65)

Other

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

26

6(4, 8)

1463(403, 5306)

249.78(66.93, 932.19)

Other

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

12

10(10, 10)

1419149(662337, 3040723)

141914.92(66233.73, 304072.32)

Other

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

12

10(10, 10)

2943125(745091, 11625406)

294312.53(74509.11, 1162540.61)

Other

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

12

10(10, 10)

13044151(8052613, 21129769)

1304415.07(805261.35, 2112976.95)

Other

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

12

31(31, 31)

1760(593, 5226)

56.63(19.07, 168.16)

Other

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

12

5(5, 6)

5827(822, 41320)

1121.19(157.64, 7974.24)

Other

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

12

5(5, 5)

7156(1634, 31335)

1431.11(326.80, 6267.07)

Other

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

2

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Other

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

2

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Other

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

2

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Other

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

2

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Other

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

2

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Other

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

2

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Other

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

12

10(10, 10)

59690(18433, 193287)

5968.98(1843.30, 19328.69)

Other

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

12

10(10, 10)

207584(111282, 387222)

20758.37(11128.23, 38722.24)

Other

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

12

10(10, 10)

340502(260014, 445904)

34050.18(26001.43, 44590.44)

Other

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

12

31(31, 31)

194(70, 540)

6.25(2.25, 17.36)

Other

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

12

5(5, 5)

603(308, 1178)

120.55(61.68, 235.61)

Other

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

12

5(5, 5)

1085(314, 3755)

217.08(62.75, 751.03)

White

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

59

10(10, 10)

25696(11780, 56051)

2569.57(1177.97, 5605.13)

White

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

59

10(10, 10)

19942(10087, 39425)

1994.21(1008.73, 3942.45)

White

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

59

10(10, 10)

47044(26121, 84723)

4704.36(2612.14, 8472.35)

White

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

59

31(31, 31)

133(80, 220)

4.27(2.58, 7.07)

White

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

59

5(5, 5)

114(52, 252)

22.67(10.29, 49.95)

White

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

59

5(5, 5)

267(127, 564)

53.48(25.36, 112.78)

White

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

32

10(10, 10)

29340(10943, 78668)

2934.04(1094.29, 7866.80)

White

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

32

10(10, 10)

47326(20981, 106754)

4732.62(2098.07, 10675.40)

White

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

32

10(10, 10)

76222(39211, 148169)

7622.24(3921.09, 14816.95)

White

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

32

31(31, 31)

266(107, 661)

8.57(3.45, 21.26)

White

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

32

5(5, 5)

175(74, 413)

35.01(14.82, 82.67)

White

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

32

5(5, 5)

340(186, 620)

67.96(37.23, 124.07)

White

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

White

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 6)

5(5, 5)

0.96(0.89, 1.04)

White

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

11

6(4, 8)

5(5, 5)

0.84(0.60, 1.19)

White

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

26

10(10, 10)

11849(5587, 25128)

1184.86(558.69, 2512.84)

White

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

26

10(10, 10)

12774(5960, 27377)

1277.38(596.02, 2737.65)

White

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

26

10(10, 10)

13775(8423, 22529)

1377.52(842.26, 2252.94)

White

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

26

31(31, 31)

79(51, 122)

2.55(1.65, 3.92)

White

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

26

5(5, 5)

55(26, 117)

10.81(5.06, 23.08)

White

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

26

5(5, 5)

182(104, 320)

36.49(20.78, 64.06)

White

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

59

10(10, 10)

492496(213175, 1137805)

49249.55(21317.53, 113780.45)

White

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

59

10(10, 10)

1134725(649066, 1983774)

113472.51(64906.64, 198377.38)

White

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

59

10(10, 10)

3250587(1889432, 5592323)

325058.65(188943.18, 559232.28)

White

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

59

31(31, 31)

1519(745, 3096)

48.86(23.97, 99.60)

White

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

59

5(5, 5)

1224(558, 2685)

242.78(110.68, 532.54)

White

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

59

5(5, 5)

1726(789, 3776)

345.25(157.85, 755.14)

White

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

32

10(10, 10)

702713(216498, 2280880)

70271.31(21649.79, 228087.97)

White

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

32

10(10, 10)

2806043(1453188, 5418350)

280604.33(145318.76, 541834.99)

White

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

32

10(10, 10)

8115051(4823866, 13651717)

811505.12(482386.62, 1365171.70)

White

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

32

31(31, 31)

3885(1946, 7755)

125.00(62.62, 249.52)

White

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

32

5(5, 5)

5741(940, 35063)

1148.15(187.99, 7012.50)

White

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

32

5(5, 5)

9928(1885, 52288)

1985.54(376.98, 10457.68)

White

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

White

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 6)

5(5, 5)

0.96(0.89, 1.04)

White

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

11

6(4, 8)

5(5, 5)

0.84(0.60, 1.19)

White

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

26

10(10, 10)

60956(21486, 172927)

6095.56(2148.65, 17292.67)

White

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

26

10(10, 10)

424862(250810, 719699)

42486.19(25081.00, 71969.88)

White

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

26

10(10, 10)

904138(526835, 1551652)

90413.77(52683.53, 155165.18)

White

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

26

31(31, 31)

341(194, 597)

10.96(6.26, 19.20)

White

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

26

5(5, 5)

161(50, 519)

31.77(9.90, 101.92)

White

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

26

5(5, 5)

569(221, 1465)

113.88(44.26, 293.00)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

389

10(10, 10)

26265(21332, 32338)

2626.52(2133.25, 3233.85)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

10(10, 10)

28266(23127, 34547)

2809.24(2297.85, 3434.43)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

10(10, 10)

49851(42322, 58718)

4985.05(4232.25, 5871.77)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

389

31(31, 31)

159(132, 191)

5.11(4.26, 6.13)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

389

5(5, 5)

114(93, 140)

22.43(18.30, 27.48)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

389

5(5, 5)

215(173, 266)

42.78(34.51, 53.03)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

35869(23611, 54493)

3586.93(2361.06, 5449.28)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

38777(25716, 58473)

3877.74(2571.60, 5847.28)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

76818(53914, 109452)

7681.81(5391.42, 10945.21)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

112

31(31, 31)

172(123, 241)

5.53(3.95, 7.75)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

162(109, 241)

31.70(20.95, 47.96)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

300(192, 467)

59.93(38.49, 93.31)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

66

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

66

5(5, 5)

5(5, 5)

1.02(0.96, 1.08)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

66

5(5, 5)

5(5, 6)

1.06(0.95, 1.18)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

13290(8770, 20139)

1328.98(876.99, 2013.91)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

11123(7688, 16091)

1112.25(768.83, 1609.08)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

19291(14336, 25958)

1921.68(1428.33, 2585.42)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

112

31(31, 31)

93(65, 133)

2.99(2.09, 4.27)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

52(35, 78)

10.16(6.91, 14.95)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

163(100, 265)

32.60(20.06, 52.96)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

389

10(10, 10)

456661(352451, 591684)

45666.13(35245.05, 59168.45)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

10(10, 10)

1176305(967228, 1430578)

116907.58(96047.07, 142298.81)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

10(10, 10)

2475664(2085297, 2939107)

247566.38(208529.74, 293910.65)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

389

31(31, 31)

1521(1191, 1943)

48.93(38.31, 62.50)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

389

5(5, 5)

1766(1369, 2279)

348.08(270.70, 447.59)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

389

5(5, 5)

3292(2526, 4290)

655.68(503.11, 854.52)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

837677(501685, 1398693)

83767.74(50168.50, 139869.31)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

2618440(1810493, 3786941)

261844.05(181049.32, 378694.08)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

5117900(3826248, 6845583)

511790.01(382624.84, 684558.33)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

112

31(31, 31)

4697(3331, 6625)

151.14(107.17, 213.15)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

4043(2544, 6427)

791.86(494.31, 1268.53)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

9026(5558, 14656)

1805.14(1111.64, 2931.28)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

66

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

66

5(5, 5)

5(5, 6)

1.03(0.95, 1.11)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

66

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

156472(94794, 258283)

15647.21(9479.35, 25828.27)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

516772(332400, 803410)

51677.18(33239.96, 80340.97)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

735886(529644, 1022438)

73304.66(52763.90, 101841.85)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

112

31(31, 31)

646(402, 1039)

20.79(12.93, 33.44)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

549(308, 976)

106.36(59.78, 189.24)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

2012(1253, 3231)

402.31(250.50, 646.10)

Table 6i. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Race and ethnic group

Group

Visit

Arm

Baseline COVID

Marker

N

Baseline GMT/GMC

Post Baseline GMT/GMC

GMTR/GMCR

Race and ethnic group

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

389

10(10, 10)

26265(21332, 32338)

2626.52(2133.25, 3233.85)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

10(10, 10)

28266(23127, 34547)

2809.24(2297.85, 3434.43)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

10(10, 10)

49851(42322, 58718)

4985.05(4232.25, 5871.77)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

389

31(31, 31)

159(132, 191)

5.11(4.26, 6.13)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

389

5(5, 5)

114(93, 140)

22.43(18.30, 27.48)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

389

5(5, 5)

215(173, 266)

42.78(34.51, 53.03)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

35869(23611, 54493)

3586.93(2361.06, 5449.28)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

38777(25716, 58473)

3877.74(2571.60, 5847.28)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

76818(53914, 109452)

7681.81(5391.42, 10945.21)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

112

31(31, 31)

172(123, 241)

5.53(3.95, 7.75)

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D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

162(109, 241)

31.70(20.95, 47.96)

White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

300(192, 467)

59.93(38.49, 93.31)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

66

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

66

5(5, 5)

5(5, 5)

1.02(0.96, 1.08)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

66

5(5, 5)

5(5, 6)

1.06(0.95, 1.18)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

13290(8770, 20139)

1328.98(876.99, 2013.91)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

11123(7688, 16091)

1112.25(768.83, 1609.08)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

19291(14336, 25958)

1921.68(1428.33, 2585.42)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

112

31(31, 31)

93(65, 133)

2.99(2.09, 4.27)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

52(35, 78)

10.16(6.91, 14.95)

White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

163(100, 265)

32.60(20.06, 52.96)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

389

10(10, 10)

456661(352451, 591684)

45666.13(35245.05, 59168.45)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

389

10(10, 10)

1176305(967228, 1430578)

116907.58(96047.07, 142298.81)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

389

10(10, 10)

2475664(2085297, 2939107)

247566.38(208529.74, 293910.65)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

389

31(31, 31)

1521(1191, 1943)

48.93(38.31, 62.50)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

389

5(5, 5)

1766(1369, 2279)

348.08(270.70, 447.59)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

389

5(5, 5)

3292(2526, 4290)

655.68(503.11, 854.52)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

837677(501685, 1398693)

83767.74(50168.50, 139869.31)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

2618440(1810493, 3786941)

261844.05(181049.32, 378694.08)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

5117900(3826248, 6845583)

511790.01(382624.84, 684558.33)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

112

31(31, 31)

4697(3331, 6625)

151.14(107.17, 213.15)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

4043(2544, 6427)

791.86(494.31, 1268.53)

White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

9026(5558, 14656)

1805.14(1111.64, 2931.28)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

66

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

66

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

66

5(5, 5)

5(5, 6)

1.03(0.95, 1.11)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

66

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

112

10(10, 10)

156472(94794, 258283)

15647.21(9479.35, 25828.27)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

112

10(10, 10)

516772(332400, 803410)

51677.18(33239.96, 80340.97)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

112

10(10, 10)

735886(529644, 1022438)

73304.66(52763.90, 101841.85)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

112

31(31, 31)

646(402, 1039)

20.79(12.93, 33.44)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

112

5(5, 5)

549(308, 976)

106.36(59.78, 189.24)

White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

112

5(5, 5)

2012(1253, 3231)

402.31(250.50, 646.10)

Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

401

10(10, 10)

20435(15720, 26563)

2043.48(1572.03, 2656.33)

Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

401

10(10, 10)

21316(17355, 26183)

2131.64(1735.47, 2618.26)

Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

401

10(10, 10)

40078(33406, 48082)

4007.80(3340.63, 4808.22)

Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

401

31(31, 31)

134(109, 163)

4.30(3.52, 5.25)

Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

401

5(5, 5)

94(73, 120)

18.48(14.42, 23.69)

Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

401

5(5, 5)

201(158, 256)

38.55(30.27, 49.10)

Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

110

10(10, 10)

41081(26678, 63260)

4108.09(2667.80, 6325.95)

Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

110

10(10, 10)

41836(28084, 62323)

4183.64(2808.41, 6232.30)

Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

110

10(10, 10)

78012(60301, 100925)

7801.16(6030.05, 10092.46)

Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

110

31(31, 31)

225(154, 327)

7.23(4.97, 10.53)

Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

110

5(5, 5)

180(119, 273)

35.62(23.51, 53.97)

Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

110

5(5, 5)

322(217, 476)

64.31(43.41, 95.25)

Communities of Color

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Communities of Color

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

65

10(10, 10)

10(10, 10)

1.01(0.99, 1.02)

Communities of Color

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Communities of Color

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

65

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Communities of Color

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

65

5(5, 5)

5(5, 5)

1.01(0.99, 1.02)

Communities of Color

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

65

5(5, 5)

5(5, 5)

0.97(0.92, 1.03)

Communities of Color

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

125

10(10, 10)

12123(8528, 17232)

1212.26(852.84, 1723.16)

Communities of Color

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

125

10(10, 10)

13408(9733, 18472)

1340.82(973.29, 1847.15)

Communities of Color

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

125

10(10, 10)

19223(14987, 24655)

1922.25(1498.72, 2465.49)

Communities of Color

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

125

31(31, 31)

86(69, 107)

2.76(2.22, 3.44)

Communities of Color

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

125

5(5, 5)

52(37, 72)

9.97(7.25, 13.70)

Communities of Color

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

125

5(5, 5)

136(101, 185)

27.26(20.12, 36.95)

Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

401

10(10, 10)

317210(238463, 421960)

31720.96(23846.31, 42196.01)

Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

401

10(10, 10)

891811(709246, 1121369)

89181.12(70924.64, 112136.95)

Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

401

10(10, 10)

2144694(1786247, 2575069)

214469.36(178624.73, 257506.94)

Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

401

31(31, 31)

1295(1015, 1651)

41.66(32.66, 53.12)

Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

401

5(5, 5)

1795(1297, 2483)

353.83(255.85, 489.32)

Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

401

5(5, 5)

2296(1766, 2986)

439.70(338.08, 571.88)

Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

110

10(10, 10)

937217(575113, 1527308)

93721.66(57511.32, 152730.78)

Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

110

10(10, 10)

2656286(1746143, 4040823)

265628.57(174614.28, 404082.28)

Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

110

10(10, 10)

6156573(4667493, 8120716)

615657.27(466749.34, 812071.58)

Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

110

31(31, 31)

2799(1834, 4272)

90.07(59.02, 137.46)

Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

110

5(5, 5)

5318(3282, 8614)

1050.73(649.58, 1699.61)

Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

110

5(5, 5)

6655(3873, 11436)

1331.09(774.70, 2287.11)

Communities of Color

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Communities of Color

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Communities of Color

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Communities of Color

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

65

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Communities of Color

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

65

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Communities of Color

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

65

5(5, 5)

5(5, 5)

0.97(0.92, 1.03)

Communities of Color

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

125

10(10, 10)

148554(100902, 218709)

14855.36(10090.22, 21870.86)

Communities of Color

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

125

10(10, 10)

440850(322338, 602935)

44085.01(32233.82, 60293.47)

Communities of Color

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

125

10(10, 10)

722847(510073, 1024378)

72284.67(51007.26, 102437.85)

Communities of Color

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

125

31(31, 31)

642(415, 992)

20.65(13.35, 31.93)

Communities of Color

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

125

5(5, 5)

564(377, 844)

108.96(73.75, 160.96)

Communities of Color

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

125

5(5, 5)

2027(1377, 2983)

405.32(275.33, 596.69)

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

114

10(10, 10)

26172(17056, 40160)

2617.17(1705.56, 4016.02)

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

114

10(10, 10)

21338(14785, 30795)

2123.44(1470.13, 3067.08)

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

114

10(10, 10)

48553(35664, 66101)

4855.29(3566.36, 6610.05)

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

114

31(31, 31)

156(107, 226)

5.01(3.45, 7.27)

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

114

5(5, 5)

108(68, 169)

21.34(13.57, 33.56)

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

114

5(5, 5)

265(164, 428)

51.89(31.77, 84.74)

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

51

10(10, 10)

43289(17390, 107761)

4328.90(1738.98, 10776.10)

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

51

10(10, 10)

42022(23027, 76685)

4202.18(2302.71, 7668.47)

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

51

10(10, 10)

95509(57224, 159407)

9550.89(5722.43, 15940.69)

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

51

31(31, 31)

305(144, 649)

9.83(4.63, 20.87)

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

51

5(5, 5)

189(89, 401)

37.82(17.82, 80.24)

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

51

5(5, 5)

495(251, 976)

98.97(50.20, 195.12)

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

24

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

24

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

24

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

24

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

24

5(5, 5)

5(5, 5)

1.00(0.94, 1.06)

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

24

5(5, 6)

5(5, 5)

0.92(0.77, 1.09)

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

33

10(10, 10)

9622(5090, 18190)

962.19(508.97, 1818.98)

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

33

10(10, 10)

11523(6092, 21795)

1152.30(609.21, 2179.54)

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

33

10(10, 10)

12996(8342, 20247)

1299.58(834.16, 2024.69)

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

33

31(31, 31)

78(47, 128)

2.49(1.51, 4.13)

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

33

5(5, 5)

45(23, 89)

8.98(4.55, 17.71)

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

33

5(5, 5)

144(83, 249)

28.82(16.67, 49.83)

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

114

10(10, 10)

426206(251599, 721989)

42620.59(25159.88, 72198.85)

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

114

10(10, 10)

1160136(785096, 1714334)

115452.03(78110.67, 170644.70)

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

114

10(10, 10)

2371902(1693620, 3321829)

237190.18(169362.04, 332182.94)

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

114

31(31, 31)

1673(1063, 2634)

53.84(34.21, 84.74)

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

114

5(5, 5)

1823(1098, 3029)

361.89(217.99, 600.77)

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

114

5(5, 5)

3048(1819, 5107)

596.52(356.34, 998.58)

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

51

10(10, 10)

785539(318346, 1938368)

78553.94(31834.62, 193836.83)

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

51

10(10, 10)

2898260(1760213, 4772100)

289826.00(176021.29, 477209.96)

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

51

10(10, 10)

7113644(4885434, 10358125)

711364.44(488543.41, 1035812.49)

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

51

31(31, 31)

4071(2490, 6657)

130.99(80.11, 214.18)

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

51

5(5, 5)

5773(1765, 18883)

1154.69(353.04, 3776.63)

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

51

5(5, 5)

7276(2190, 24176)

1455.30(438.02, 4835.15)

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

24

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

24

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

24

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

24

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

24

5(5, 5)

5(5, 5)

0.98(0.94, 1.02)

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

24

5(5, 6)

5(5, 5)

0.92(0.77, 1.09)

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

33

10(10, 10)

137408(49761, 379435)

13740.81(4976.09, 37943.46)

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

33

10(10, 10)

362658(183846, 715388)

36265.84(18384.60, 71538.76)

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

33

10(10, 10)

689318(416234, 1141569)

68931.82(41623.39, 114156.88)

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

33

31(31, 31)

392(223, 689)

12.60(7.17, 22.15)

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

33

5(5, 5)

376(128, 1106)

75.10(25.50, 221.19)

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

33

5(5, 5)

733(294, 1828)

146.70(58.86, 365.59)

Table 6j. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Race and ethnic group

Group

Visit

Arm

Baseline COVID

Marker

N

Baseline GMT/GMC

Post Baseline GMT/GMC

GMTR/GMCR

Age, Race and ethnic group

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

184

10(10, 10)

15225(10981, 21111)

1522.55(1098.06, 2111.14)

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

184

10(10, 10)

15073(11675, 19460)

1507.27(1167.47, 1945.98)

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

184

10(10, 10)

29395(23444, 36855)

2939.47(2344.44, 3685.54)

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

184

31(31, 31)

108(84, 138)

3.47(2.71, 4.44)

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

184

5(5, 5)

71(52, 97)

13.96(10.26, 19.01)

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

184

5(5, 5)

157(117, 212)

29.84(22.10, 40.30)

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

61

10(10, 10)

29912(17766, 50360)

2991.16(1776.60, 5036.04)

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

61

10(10, 10)

29822(18371, 48412)

2982.23(1837.09, 4841.19)

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

61

10(10, 10)

57733(42258, 78877)

5773.35(4225.78, 7887.66)

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

61

31(31, 31)

183(116, 288)

5.88(3.73, 9.25)

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

61

5(5, 5)

132(80, 218)

26.03(15.76, 42.98)

Age < 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

61

5(5, 5)

246(152, 396)

49.12(30.48, 79.15)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 6)

5(5, 5)

0.97(0.90, 1.03)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

71

10(10, 10)

9616(6229, 14845)

961.64(622.93, 1484.51)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

71

10(10, 10)

10405(7005, 15455)

1040.47(700.48, 1545.47)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

71

10(10, 10)

15039(11060, 20450)

1503.95(1106.02, 2045.04)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

71

31(31, 31)

72(56, 94)

2.33(1.79, 3.03)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

71

5(5, 5)

40(27, 60)

7.72(5.23, 11.40)

Age < 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

71

5(5, 5)

109(75, 158)

21.79(15.02, 31.61)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

184

10(10, 10)

225798(158391, 321891)

22579.76(15839.09, 32189.06)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

184

10(10, 10)

635700(478247, 844990)

63570.00(47824.74, 84499.05)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

184

10(10, 10)

1642968(1309743, 2060971)

164296.78(130974.35, 206097.09)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

184

31(31, 31)

1009(746, 1364)

32.45(23.99, 43.89)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

184

5(5, 5)

1298(867, 1944)

255.45(170.64, 382.41)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

184

5(5, 5)

1750(1265, 2420)

332.16(240.00, 459.71)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

61

10(10, 10)

662510(365813, 1199844)

66250.96(36581.35, 119984.37)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

61

10(10, 10)

1996929(1195439, 3335785)

199692.93(119543.88, 333578.50)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

61

10(10, 10)

4920875(3498156, 6922222)

492087.48(349815.57, 692222.16)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

61

31(31, 31)

2140(1278, 3586)

68.87(41.11, 115.38)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

61

5(5, 5)

3520(1972, 6283)

693.62(389.37, 1235.59)

Age < 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

61

5(5, 5)

4323(2249, 8307)

864.56(449.90, 1661.40)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 6)

5(5, 5)

0.97(0.90, 1.03)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

71

10(10, 10)

103141(64055, 166079)

10314.12(6405.47, 16607.85)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

71

10(10, 10)

303905(207110, 445939)

30390.51(20710.96, 44593.94)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

71

10(10, 10)

516574(333686, 799701)

51657.40(33368.56, 79970.09)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

71

31(31, 31)

492(287, 844)

15.84(9.24, 27.16)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

71

5(5, 5)

383(235, 624)

74.23(46.34, 118.88)

Age < 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

71

5(5, 5)

1755(1099, 2803)

351.01(219.78, 560.57)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

57

10(10, 10)

21852(12789, 37338)

2185.18(1278.86, 3733.81)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

10(10, 10)

16367(10352, 25879)

1626.54(1027.59, 2574.60)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

10(10, 10)

39666(26991, 58295)

3966.64(2699.09, 5829.46)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

57

31(31, 31)

144(91, 229)

4.64(2.92, 7.37)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

57

5(5, 5)

90(51, 158)

17.81(10.08, 31.46)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

57

5(5, 5)

244(133, 447)

47.45(25.53, 88.19)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

28

10(10, 10)

32246(10368, 100284)

3224.56(1036.84, 10028.35)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

28

10(10, 10)

31627(15068, 66386)

3162.72(1506.76, 6638.63)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

28

10(10, 10)

71735(37849, 135956)

7173.46(3784.94, 13595.60)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

28

31(31, 31)

246(97, 626)

7.93(3.12, 20.16)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

28

5(5, 5)

144(57, 363)

28.76(11.38, 72.67)

Age < 65 NA

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

28

5(5, 5)

420(184, 958)

83.99(36.81, 191.68)

Age < 65 NA

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

13

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 NA

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

13

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 NA

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

13

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 NA

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

13

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 NA

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

13

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age < 65 NA

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

13

6(4, 7)

5(5, 5)

0.89(0.71, 1.12)

Age < 65 NA

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

17

10(10, 10)

6966(3231, 15018)

696.57(323.09, 1501.81)

Age < 65 NA

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

17

10(10, 10)

8208(3783, 17810)

820.84(378.33, 1780.96)

Age < 65 NA

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

17

10(10, 10)

9630(5602, 16553)

962.96(560.20, 1655.28)

Age < 65 NA

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

17

31(31, 31)

64(35, 117)

2.07(1.14, 3.78)

Age < 65 NA

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

17

5(5, 5)

34(15, 77)

6.80(2.99, 15.47)

Age < 65 NA

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

17

5(5, 5)

111(58, 212)

22.27(11.69, 42.41)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

57

10(10, 10)

354263(183187, 685104)

35426.25(18318.68, 68510.37)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

10(10, 10)

971499(597531, 1579515)

96544.91(59361.98, 157018.34)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

10(10, 10)

1915520(1259493, 2913249)

191551.99(125949.29, 291324.88)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

57

31(31, 31)

1421(804, 2514)

45.73(25.86, 80.89)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

57

5(5, 5)

1495(796, 2810)

297.46(158.41, 558.57)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

57

5(5, 5)

2740(1441, 5210)

532.92(280.58, 1012.22)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

28

10(10, 10)

575111(186827, 1770368)

57511.14(18682.73, 177036.84)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

28

10(10, 10)

2275810(1220749, 4242735)

227581.04(122074.87, 424273.49)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

28

10(10, 10)

6106951(3814646, 9776753)

610695.08(381464.57, 977675.30)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

28

31(31, 31)

3434(1879, 6274)

110.47(60.45, 201.88)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

28

5(5, 5)

3680(847, 15980)

735.95(169.47, 3196.04)

Age < 65 NA

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

28

5(5, 5)

4801(1073, 21477)

960.11(214.60, 4295.47)

Age < 65 NA

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

13

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 NA

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

13

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 NA

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

13

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 NA

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

13

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 NA

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

13

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age < 65 NA

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

13

6(4, 7)

5(5, 5)

0.89(0.71, 1.12)

Age < 65 NA

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

17

10(10, 10)

100450(29034, 347532)

10045.04(2903.41, 34753.17)

Age < 65 NA

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

17

10(10, 10)

252837(111209, 574836)

25283.72(11120.86, 57483.57)

Age < 65 NA

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

17

10(10, 10)

458256(247599, 848141)

45825.62(24759.88, 84814.11)

Age < 65 NA

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

17

31(31, 31)

268(136, 528)

8.62(4.38, 16.99)

Age < 65 NA

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

17

5(5, 5)

260(70, 959)

51.99(14.09, 191.76)

Age < 65 NA

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

17

5(5, 5)

498(164, 1513)

99.57(32.76, 302.64)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

191

10(10, 10)

20206(15628, 26125)

2020.60(1562.79, 2612.53)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

191

10(10, 10)

21792(16993, 27947)

2162.24(1685.47, 2773.86)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

191

10(10, 10)

37874(30932, 46375)

3787.42(3093.16, 4637.50)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

191

31(31, 31)

140(112, 176)

4.52(3.62, 5.65)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

191

5(5, 5)

87(67, 112)

17.06(13.29, 21.90)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

191

5(5, 5)

177(136, 230)

35.24(27.06, 45.89)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

56

10(10, 10)

30267(18107, 50593)

3026.68(1810.67, 5059.33)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

10(10, 10)

32908(19774, 54765)

3290.75(1977.37, 5476.50)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

10(10, 10)

61692(39829, 95555)

6169.16(3982.91, 9555.45)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

56

31(31, 31)

147(97, 222)

4.72(3.12, 7.13)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

56

5(5, 5)

138(85, 224)

26.85(16.13, 44.71)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

56

5(5, 5)

249(144, 430)

49.77(28.82, 85.96)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

36

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

36

5(5, 5)

5(5, 6)

1.02(0.95, 1.11)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

36

5(5, 5)

5(5, 6)

1.08(0.93, 1.24)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

61

10(10, 10)

10617(6447, 17484)

1061.70(644.71, 1748.38)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

61

10(10, 10)

8086(5166, 12656)

808.62(516.63, 1265.64)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

61

10(10, 10)

14680(10227, 21072)

1467.99(1022.70, 2107.18)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

61

31(31, 31)

83(54, 127)

2.66(1.72, 4.09)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

61

5(5, 6)

42(26, 67)

8.07(5.08, 12.83)

Age < 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

61

5(5, 5)

151(84, 273)

30.30(16.80, 54.63)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

191

10(10, 10)

357009(259114, 491889)

35700.90(25911.43, 49188.89)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

191

10(10, 10)

888626(697711, 1131782)

88169.28(69150.29, 112419.22)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

191

10(10, 10)

1913249(1547729, 2365094)

191324.94(154772.86, 236509.37)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

191

31(31, 31)

1290(953, 1746)

41.50(30.66, 56.18)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

191

5(5, 5)

1338(979, 1829)

263.42(193.54, 358.52)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

191

5(5, 5)

2687(1939, 3724)

536.43(387.01, 743.54)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

56

10(10, 10)

642060(340881, 1209343)

64206.05(34088.06, 120934.33)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

10(10, 10)

2177062(1379785, 3435028)

217706.21(137978.48, 343502.79)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

10(10, 10)

4131254(2882431, 5921133)

413125.39(288243.13, 592113.28)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

56

31(31, 31)

4572(3007, 6951)

147.09(96.74, 223.65)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

56

5(5, 5)

3195(1821, 5609)

622.41(351.02, 1103.63)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

56

5(5, 5)

8479(4665, 15413)

1695.87(932.96, 3082.63)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

36

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

36

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

36

5(5, 5)

5(5, 6)

1.04(0.94, 1.14)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

36

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

61

10(10, 10)

116557(63410, 214249)

11655.70(6341.01, 21424.89)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

61

10(10, 10)

393861(229558, 675760)

39386.07(22955.83, 67575.99)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

61

10(10, 10)

545084(365671, 812524)

54508.41(36567.12, 81252.42)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

61

31(31, 31)

515(290, 916)

16.57(9.32, 29.48)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

61

5(5, 6)

381(189, 768)

73.51(36.44, 148.31)

Age < 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

61

5(5, 5)

1764(999, 3115)

352.87(199.88, 622.98)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

217

10(10, 10)

60976(48224, 77101)

6097.63(4822.39, 7710.11)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

217

10(10, 10)

77255(63382, 94164)

7725.47(6338.20, 9416.38)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

217

10(10, 10)

126794(106328, 151199)

12679.40(10632.79, 15119.94)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

217

31(31, 31)

298(242, 368)

9.60(7.78, 11.85)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

217

5(5, 5)

264(208, 334)

52.40(41.41, 66.30)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

217

5(5, 5)

505(398, 640)

99.81(78.81, 126.41)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

49

10(10, 10)

158096(97307, 256859)

15809.58(9730.74, 25685.91)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

49

10(10, 10)

176184(121276, 255950)

17618.35(12127.61, 25595.02)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

49

10(10, 10)

280167(215302, 364573)

28016.66(21530.18, 36457.34)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

49

31(31, 31)

541(360, 815)

17.42(11.57, 26.23)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

49

5(5, 5)

675(425, 1072)

135.06(85.06, 214.48)

Age >= 65 Communities of Color

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

49

5(5, 5)

1010(691, 1476)

201.93(138.16, 295.13)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

35

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

35

10(10, 10)

10(10, 11)

1.03(0.98, 1.08)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

35

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

35

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

35

5(5, 5)

5(5, 5)

1.03(0.97, 1.09)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

35

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

54

10(10, 10)

27841(18307, 42343)

2784.15(1830.66, 4234.25)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

54

10(10, 10)

33326(22782, 48749)

3332.59(2278.23, 4874.90)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

54

10(10, 10)

46390(34493, 62391)

4639.04(3449.32, 6239.10)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

54

31(31, 31)

158(109, 228)

5.07(3.51, 7.34)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

54

5(5, 6)

130(86, 198)

24.93(16.40, 37.89)

Age >= 65 Communities of Color

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

54

5(5, 5)

305(203, 456)

60.91(40.67, 91.23)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

217

10(10, 10)

1121497(852812, 1474832)

112149.67(85281.20, 147483.23)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

217

10(10, 10)

3136695(2516739, 3909366)

313669.50(251673.94, 390936.61)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

217

10(10, 10)

5772169(4795005, 6948466)

577216.86(479500.51, 694846.61)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

217

31(31, 31)

3275(2586, 4147)

105.36(83.20, 133.42)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

217

5(5, 5)

5980(4425, 8080)

1186.99(879.29, 1602.37)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

217

5(5, 5)

6304(4760, 8349)

1246.49(942.48, 1648.55)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

49

10(10, 10)

4089667(2605308, 6419732)

408966.74(260530.82, 641973.15)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

49

10(10, 10)

8924175(6539507, 12178426)

892417.54(653950.72, 1217842.63)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

49

10(10, 10)

15943674(14399906, 17652946)

1594367.44(1439990.56, 1765294.59)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

49

31(31, 31)

8751(6222, 12309)

281.58(200.20, 396.03)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

49

5(5, 5)

30660(16911, 55585)

6131.90(3382.20, 11117.09)

Age >= 65 Communities of Color

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

49

5(5, 5)

41609(22641, 76469)

8321.89(4528.22, 15293.84)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

35

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

35

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

35

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

35

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

35

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

35

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

54

10(10, 10)

550456(341674, 886814)

55045.58(34167.43, 88681.42)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

54

10(10, 10)

1675970(1109382, 2531927)

167596.95(110938.18, 253192.72)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

54

10(10, 10)

2414774(1761675, 3309994)

241477.37(176167.47, 330999.36)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

54

31(31, 31)

1663(1002, 2760)

53.49(32.22, 88.80)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

54

5(5, 6)

2255(1231, 4131)

432.22(239.47, 780.13)

Age >= 65 Communities of Color

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

54

5(5, 5)

3397(1919, 6013)

679.38(383.83, 1202.51)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

57

10(10, 10)

49043(31228, 77020)

4904.28(3122.81, 7702.04)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

10(10, 10)

53715(36054, 80027)

5371.49(3605.38, 8002.74)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

10(10, 10)

98141(69907, 137777)

9814.07(6990.69, 13777.74)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

57

31(31, 31)

204(133, 312)

6.55(4.27, 10.04)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

57

5(5, 5)

203(132, 314)

40.06(25.85, 62.07)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

57

5(5, 5)

354(233, 538)

70.84(46.60, 107.68)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

23

10(10, 10)

130473(57537, 295867)

13047.33(5753.69, 29586.71)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

23

10(10, 10)

121838(63001, 235623)

12183.80(6300.10, 23562.32)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

23

10(10, 10)

279081(183894, 423540)

27908.11(18389.36, 42353.99)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

23

31(31, 31)

682(322, 1444)

21.94(10.36, 46.47)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

23

5(5, 5)

527(229, 1212)

105.43(45.85, 242.43)

Age >= 65 NA

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

23

5(5, 5)

915(368, 2271)

182.96(73.70, 454.21)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 6)

5(5, 6)

1.00(0.79, 1.26)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

11

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

16

10(10, 10)

38243(18850, 77587)

3824.28(1885.01, 7758.65)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

16

10(10, 10)

49070(27361, 88004)

4907.03(2736.11, 8800.42)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

16

10(10, 10)

46769(33653, 64997)

4676.95(3365.34, 6499.73)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

16

31(31, 31)

171(84, 348)

5.51(2.71, 11.20)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

16

5(5, 5)

147(74, 294)

29.47(14.75, 58.87)

Age >= 65 NA

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

16

5(5, 5)

434(181, 1037)

86.75(36.27, 207.48)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

57

10(10, 10)

811243(465961, 1412384)

81124.33(46596.10, 141238.35)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

57

10(10, 10)

2151815(1377198, 3362124)

215181.53(137719.77, 336212.38)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

57

10(10, 10)

4991145(3398296, 7330594)

499114.47(339829.55, 733059.43)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

57

31(31, 31)

2955(1916, 4557)

95.07(61.65, 146.61)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

57

5(5, 5)

3637(2018, 6553)

716.11(396.99, 1291.75)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

57

5(5, 5)

4416(2458, 7933)

883.21(491.66, 1586.56)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

23

10(10, 10)

2526030(1138031, 5606899)

252602.96(113803.12, 560689.90)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

23

10(10, 10)

7169252(4822943, 10657014)

716925.16(482294.29, 1065701.36)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

23

10(10, 10)

12598885(9618396, 16502950)

1259888.54(961839.64, 1650294.97)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

23

31(31, 31)

7706(4284, 13862)

247.94(137.84, 446.01)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

23

5(5, 5)

31205(9687, 100517)

6240.90(1937.44, 20103.31)

Age >= 65 NA

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

23

5(5, 5)

34560(12890, 92663)

6912.00(2577.94, 18532.55)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

11

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

11

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

11

5(5, 6)

5(5, 5)

0.92(0.78, 1.08)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

11

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

16

10(10, 10)

523872(247776, 1107622)

52387.18(24777.56, 110762.16)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

16

10(10, 10)

1693133(825083, 3474439)

169313.29(82508.27, 347443.85)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

16

10(10, 10)

3943154(2654649, 5857069)

394315.41(265464.92, 585706.92)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

16

31(31, 31)

1978(1002, 3906)

63.66(32.25, 125.66)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

16

5(5, 5)

1807(568, 5747)

361.50(113.70, 1149.36)

Age >= 65 NA

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

16

5(5, 5)

3840(1748, 8436)

768.10(349.69, 1687.17)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

198

10(10, 10)

69249(55076, 87069)

6924.88(5507.59, 8706.88)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

198

10(10, 10)

73932(60126, 90908)

7393.17(6012.58, 9090.78)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

198

10(10, 10)

137647(115459, 164098)

13764.67(11545.92, 16409.77)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

198

31(31, 31)

250(199, 313)

8.04(6.41, 10.09)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

198

5(5, 5)

312(245, 396)

61.67(48.46, 78.49)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

198

5(5, 5)

443(344, 572)

87.61(67.88, 113.08)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

56

10(10, 10)

69442(45034, 107080)

6944.24(4503.40, 10708.03)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

10(10, 10)

73428(52858, 102003)

7342.78(5285.80, 10200.25)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

10(10, 10)

180271(131325, 247459)

18027.06(13132.46, 24745.94)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

56

31(31, 31)

319(217, 468)

10.26(6.99, 15.04)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

56

5(5, 5)

302(202, 453)

60.44(40.36, 90.53)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

56

5(5, 5)

617(410, 929)

123.45(82.07, 185.70)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

51

10(10, 10)

33323(19045, 58305)

3332.31(1904.51, 5830.50)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

51

10(10, 10)

41024(27015, 62296)

4102.37(2701.54, 6229.59)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

51

10(10, 11)

59025(43239, 80575)

5787.41(4256.66, 7868.64)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

51

31(31, 31)

150(97, 234)

4.83(3.11, 7.52)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

51

5(5, 5)

133(79, 223)

26.13(15.64, 43.64)

Age >= 65 White Non-Hispanic

D29 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

51

5(5, 5)

220(129, 376)

43.97(25.75, 75.10)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti N IgG (IU/ml)

198

10(10, 10)

1134514(860442, 1495885)

113451.38(86044.17, 149588.46)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti RBD IgG (IU/ml)

198

10(10, 10)

3317133(2680755, 4104581)

331713.32(268075.45, 410458.06)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Anti Spike IgG (IU/ml)

198

10(10, 10)

6418135(5319106, 7744244)

641813.49(531910.59, 774424.45)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Live virus-nAb MN50

198

31(31, 31)

2795(2150, 3633)

89.93(69.19, 116.90)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID50

198

5(5, 5)

4927(3617, 6712)

975.23(715.09, 1330.02)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Negative

Pseudovirus-nAb ID80

198

5(5, 5)

6970(5146, 9440)

1377.02(1018.48, 1861.77)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti N IgG (IU/ml)

56

10(10, 10)

2356992(1476846, 3761673)

235699.21(147684.59, 376167.31)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti RBD IgG (IU/ml)

56

10(10, 10)

5369077(3862906, 7462514)

536907.71(386290.61, 746251.36)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Anti Spike IgG (IU/ml)

56

10(10, 10)

11772991(9170091, 15114716)

1177299.12(917009.09, 1511471.63)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Live virus-nAb MN50

56

31(31, 31)

5220(3460, 7876)

167.96(111.33, 253.41)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID50

56

5(5, 5)

10102(5610, 18188)

2020.32(1122.10, 3637.54)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Vaccine

Positive

Pseudovirus-nAb ID80

56

5(5, 5)

11507(7227, 18323)

2301.42(1445.33, 3664.59)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti N IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti RBD IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Anti Spike IgG (IU/ml)

30

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Live virus-nAb MN50

30

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID50

30

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Negative

Pseudovirus-nAb ID80

30

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti N IgG (IU/ml)

51

10(10, 10)

522444(300333, 908818)

52244.40(30033.28, 90881.77)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti RBD IgG (IU/ml)

51

10(10, 10)

1571081(1042702, 2367211)

157108.10(104270.20, 236721.09)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Anti Spike IgG (IU/ml)

51

10(10, 11)

2514418(1740250, 3632983)

246538.40(170920.16, 355611.56)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Live virus-nAb MN50

51

31(31, 31)

1636(946, 2828)

52.63(30.45, 90.98)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID50

51

5(5, 5)

2451(1341, 4480)

482.44(264.98, 878.34)

Age >= 65 White Non-Hispanic

D57 fold-rise over D1

Placebo

Positive

Pseudovirus-nAb ID80

51

5(5, 5)

3440(1815, 6520)

688.09(363.09, 1304.00)

Table 7. The ratios of GMTs/GMCs between groups

Visit

Arm

Baseline COVID

Marker

Comparison

Group 1 GMT/GMC

Group 2 GMT/GMC

Ratios of GMT/GMC

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.01(1.00, 1.01)

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Live virus-nAb MN50

Age < 65 vs Age >= 65

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

1.00(0.99, 1.02)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

1.01(0.99, 1.03)

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Live virus-nAb MN50

Age < 65 vs Age >= 65

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

1.02(0.99, 1.04)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Live virus-nAb MN50

Age < 65 vs Age >= 65

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

0.99(0.97, 1.02)

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

1.03(0.99, 1.07)

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

0.99(0.97, 1.01)

Day 1

Placebo

Positive

Live virus-nAb MN50

Age < 65 vs Age >= 65

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

1.01(0.96, 1.05)

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

18658(15448, 22535)

63096(53856, 73923)

0.30(0.23, 0.38)

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

18570(15669, 22007)

71407(62056, 82168)

0.26(0.21, 0.32)

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

35143(30513, 40475)

127358(112877, 143697)

0.28(0.23, 0.33)

Day 29

Vaccine

Negative

Live virus-nAb MN50

Age < 65 vs Age >= 65

129(111, 152)

256(220, 298)

0.51(0.41, 0.63)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

82(68, 98)

277(235, 326)

0.29(0.23, 0.38)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

178(147, 216)

447(378, 528)

0.40(0.31, 0.51)

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

30497(21247, 43773)

102819(75618, 139805)

0.30(0.18, 0.48)

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

31564(22945, 43423)

107940(85062, 136972)

0.29(0.20, 0.44)

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

61982(47941, 80136)

226833(186901, 275296)

0.27(0.20, 0.38)

Day 29

Vaccine

Positive

Live virus-nAb MN50

Age < 65 vs Age >= 65

174(129, 236)

440(335, 578)

0.40(0.26, 0.59)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

137(98, 190)

438(326, 589)

0.31(0.20, 0.49)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

273(194, 383)

783(585, 1047)

0.35(0.22, 0.54)

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

0.99(0.97, 1.01)

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Live virus-nAb MN50

Age < 65 vs Age >= 65

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

0.99(0.95, 1.04)

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

1.03(0.97, 1.10)

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

9585(7004, 13117)

31839(22967, 44138)

0.30(0.19, 0.47)

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

8824(6622, 11759)

39035(30117, 50594)

0.23(0.15, 0.33)

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

13814(11019, 17316)

52144(43046, 63165)

0.26(0.20, 0.36)

Day 29

Placebo

Positive

Live virus-nAb MN50

Age < 65 vs Age >= 65

76(59, 98)

156(119, 205)

0.49(0.34, 0.70)

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

40(29, 54)

134(98, 182)

0.30(0.19, 0.46)

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

129(92, 180)

275(198, 381)

0.47(0.29, 0.75)

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

307742(245520, 385733)

1074000(887932, 1299059)

0.29(0.21, 0.38)

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

808208(680044, 960528)

3050568(2626433, 3543196)

0.26(0.21, 0.33)

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

1822080(1572698, 2111007)

5971935(5245378, 6799131)

0.31(0.25, 0.37)

Day 57

Vaccine

Negative

Live virus-nAb MN50

Age < 65 vs Age >= 65

1209(984, 1484)

2964(2499, 3517)

0.41(0.31, 0.53)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

1347(1070, 1694)

5003(4056, 6170)

0.27(0.20, 0.37)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

2347(1879, 2933)

6297(5132, 7727)

0.37(0.28, 0.50)

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

636064(421509, 959832)

2860668(2102225, 3892742)

0.22(0.13, 0.37)

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

2129806(1580185, 2870596)

6708518(5477341, 8216434)

0.32(0.22, 0.46)

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

4719631(3771941, 5905425)

13173416(11520206, 15063871)

0.36(0.28, 0.47)

Day 57

Vaccine

Positive

Live virus-nAb MN50

Age < 65 vs Age >= 65

3328(2496, 4437)

6671(5177, 8596)

0.50(0.34, 0.73)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

3392(2228, 5165)

18112(11950, 27452)

0.19(0.10, 0.34)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

6035(3851, 9458)

21727(15143, 31174)

0.28(0.16, 0.49)

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Live virus-nAb MN50

Age < 65 vs Age >= 65

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

1.02(0.98, 1.06)

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

Age < 65 vs Age >= 65

109167(73580, 161968)

532830(380457, 746228)

0.20(0.12, 0.34)

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

Age < 65 vs Age >= 65

335691(242201, 465269)

1627241(1242074, 2131847)

0.21(0.14, 0.32)

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

Age < 65 vs Age >= 65

520333(398930, 678681)

2650955(2125167, 3306827)

0.20(0.14, 0.28)

Day 57

Placebo

Positive

Live virus-nAb MN50

Age < 65 vs Age >= 65

456(318, 653)

1693(1208, 2373)

0.27(0.16, 0.44)

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

Age < 65 vs Age >= 65

358(231, 555)

2270(1516, 3398)

0.16(0.09, 0.29)

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

Age < 65 vs Age >= 65

1432(977, 2099)

3482(2359, 5139)

0.41(0.24, 0.71)

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(0.99, 1.01)

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 5)

5(5, 5)

1.01(0.98, 1.03)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 5)

5(5, 5)

0.98(0.96, 1.00)

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 5)

5(5, 5)

1.01(0.96, 1.06)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 6)

5(5, 5)

1.03(0.97, 1.10)

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 5)

5(5, 5)

0.96(0.92, 1.01)

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 5)

5(5, 5)

0.98(0.93, 1.04)

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

15573(12291, 19732)

19544(15538, 24583)

0.80(0.57, 1.11)

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

15353(12212, 19303)

19500(15882, 23941)

0.79(0.58, 1.07)

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

28809(23868, 34773)

36983(31175, 43874)

0.78(0.60, 1.00)

Day 29

Vaccine

Negative

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

111(92, 134)

135(111, 163)

0.82(0.63, 1.08)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

66(52, 85)

86(69, 108)

0.77(0.55, 1.08)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

131(103, 168)

193(153, 243)

0.68(0.49, 0.96)

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

31496(19820, 50049)

30233(19445, 47008)

1.04(0.55, 1.98)

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

26426(18770, 37205)

33109(22325, 49104)

0.80(0.47, 1.35)

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

61629(46183, 82240)

62078(45232, 85198)

0.99(0.65, 1.52)

Day 29

Vaccine

Positive

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

176(125, 247)

174(120, 252)

1.01(0.61, 1.67)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

154(99, 241)

133(89, 198)

1.16(0.64, 2.12)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

244(153, 388)

281(186, 425)

0.87(0.46, 1.61)

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 5)

5(5, 5)

0.98(0.94, 1.02)

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 5)

5(5, 6)

0.96(0.89, 1.04)

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10580(6916, 16185)

9353(6416, 13636)

1.13(0.64, 2.00)

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10488(7074, 15550)

8455(5990, 11934)

1.24(0.74, 2.09)

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

16856(12606, 22539)

13149(10011, 17270)

1.28(0.86, 1.91)

Day 29

Placebo

Positive

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

90(65, 123)

73(54, 99)

1.23(0.79, 1.91)

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

50(35, 72)

37(26, 54)

1.34(0.81, 2.24)

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

132(88, 198)

128(85, 192)

1.03(0.58, 1.83)

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

223078(166792, 298359)

334258(254171, 439580)

0.67(0.45, 1.00)

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

706517(549446, 908489)

836616(680060, 1029211)

0.84(0.61, 1.17)

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

1471756(1181271, 1833674)

1924817(1613922, 2295601)

0.76(0.58, 1.01)

Day 57

Vaccine

Negative

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

1195(918, 1556)

1212(945, 1554)

0.99(0.69, 1.42)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

1048(765, 1436)

1436(1089, 1895)

0.73(0.48, 1.11)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

1728(1292, 2312)

2540(1939, 3325)

0.68(0.46, 1.01)

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

633405(390586, 1027180)

636781(384043, 1055845)

0.99(0.49, 2.00)

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

1991662(1337027, 2966819)

2168568(1507995, 3118502)

0.92(0.54, 1.57)

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

4099034(3012770, 5576953)

4902017(3734241, 6434980)

0.84(0.55, 1.26)

Day 57

Vaccine

Positive

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

2877(1988, 4162)

3461(2435, 4918)

0.83(0.50, 1.38)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

2857(1666, 4900)

3553(2126, 5936)

0.80(0.38, 1.69)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

5836(3497, 9740)

6090(3502, 10589)

0.96(0.45, 2.04)

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 5)

5(5, 5)

0.98(0.93, 1.02)

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

133749(83326, 214685)

103812(64361, 167445)

1.29(0.66, 2.52)

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

383038(253510, 578749)

324898(219045, 481905)

1.18(0.67, 2.09)

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

Age < 65 Not at-risk vs Age < 65 At-risk

659212(474785, 915279)

490719(355848, 676707)

1.34(0.85, 2.13)

Day 57

Placebo

Positive

Live virus-nAb MN50

Age < 65 Not at-risk vs Age < 65 At-risk

550(346, 876)

435(282, 671)

1.26(0.67, 2.39)

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

Age < 65 Not at-risk vs Age < 65 At-risk

510(319, 814)

329(193, 560)

1.55(0.76, 3.16)

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

Age < 65 Not at-risk vs Age < 65 At-risk

1374(873, 2162)

1447(910, 2301)

0.95(0.50, 1.82)

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.01(0.99, 1.03)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.02(1.00, 1.04)

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.03(0.98, 1.08)

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.98(0.96, 1.01)

Day 1

Placebo

Positive

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.99(0.94, 1.05)

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.61(0.45, 0.83)

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.58(0.44, 0.77)

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.65(0.51, 0.82)

Day 29

Vaccine

Negative

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.78(0.58, 1.06)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.60(0.44, 0.83)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.65(0.47, 0.91)

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.65(0.35, 1.18)

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.86(0.53, 1.41)

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.89(0.59, 1.32)

Day 29

Vaccine

Positive

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.89(0.51, 1.53)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.59(0.33, 1.06)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.81(0.46, 1.42)

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.02(0.98, 1.06)

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.05(0.98, 1.12)

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.71(0.35, 1.42)

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.65(0.38, 1.12)

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.66(0.45, 0.96)

Day 29

Placebo

Positive

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.77(0.43, 1.38)

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.71(0.36, 1.38)

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.81(0.40, 1.68)

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.60(0.41, 0.87)

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.56(0.42, 0.75)

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.54(0.42, 0.69)

Day 57

Vaccine

Negative

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.83(0.59, 1.18)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.47(0.31, 0.71)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.85(0.56, 1.27)

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.78(0.42, 1.45)

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.91(0.59, 1.41)

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.76(0.57, 1.02)

Day 57

Vaccine

Positive

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.66(0.39, 1.11)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.56(0.24, 1.30)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.85(0.41, 1.78)

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

1.00(1.00, 1.00)

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.76(0.38, 1.51)

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.88(0.49, 1.58)

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.75(0.47, 1.20)

Day 57

Placebo

Positive

Live virus-nAb MN50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.86(0.43, 1.72)

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.89(0.38, 2.10)

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

Age >= 65 Not at-risk vs Age >= 65 At-risk

0.63(0.27, 1.45)

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(0.99, 1.00)

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

5(5, 5)

5(5, 5)

0.98(0.97, 1.00)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

5(5, 6)

5(5, 5)

1.08(0.98, 1.20)

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

5(5, 5)

5(5, 5)

1.02(0.97, 1.07)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

5(5, 5)

5(5, 5)

0.99(0.98, 1.01)

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(0.99, 1.00)

Day 1

Placebo

Positive

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

5(5, 5)

5(5, 5)

0.98(0.93, 1.03)

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

17300(10454, 28630)

24177(20485, 28533)

0.72(0.42, 1.23)

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

21079(13535, 32828)

25435(21965, 29454)

0.83(0.51, 1.34)

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

41454(27925, 61537)

46892(41468, 53025)

0.88(0.58, 1.35)

Day 29

Vaccine

Negative

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

105(77, 143)

154(134, 178)

0.68(0.48, 0.97)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

77(49, 122)

107(91, 126)

0.72(0.44, 1.18)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

159(105, 241)

214(181, 254)

0.74(0.47, 1.17)

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

42228(22471, 79357)

41958(29839, 59000)

1.01(0.49, 2.08)

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

50892(30166, 85856)

39610(29152, 53820)

1.28(0.69, 2.38)

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

85084(58117, 124565)

81834(63759, 105035)

1.04(0.65, 1.67)

Day 29

Vaccine

Positive

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

281(151, 524)

195(148, 257)

1.44(0.73, 2.84)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

197(108, 362)

179(131, 246)

1.10(0.55, 2.19)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

351(193, 638)

337(240, 473)

1.04(0.52, 2.08)

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 11)

10(10, 10)

1.02(0.98, 1.05)

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

5(5, 5)

5(5, 5)

1.00(0.95, 1.05)

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

5(5, 5)

5(5, 6)

0.97(0.91, 1.03)

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

15333(8092, 29052)

12616(9255, 17197)

1.22(0.60, 2.45)

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

14454(8294, 25189)

12153(9187, 16078)

1.19(0.64, 2.21)

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

22217(16404, 30091)

18891(15084, 23659)

1.18(0.80, 1.73)

Day 29

Placebo

Positive

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

69(49, 96)

94(72, 122)

0.73(0.48, 1.12)

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

55(30, 101)

52(38, 69)

1.06(0.54, 2.09)

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

141(84, 236)

148(105, 210)

0.95(0.51, 1.76)

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

328439(166727, 646999)

394932(324377, 480834)

0.83(0.41, 1.68)

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

862213(552408, 1345763)

1095375(939605, 1276970)

0.79(0.48, 1.28)

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

2101292(1544642, 2858545)

2286047(2004495, 2607145)

0.92(0.65, 1.30)

Day 57

Vaccine

Negative

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

1167(732, 1862)

1517(1264, 1820)

0.77(0.47, 1.27)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

1893(1142, 3138)

1811(1469, 2233)

1.05(0.60, 1.81)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

1726(1067, 2792)

3149(2585, 3836)

0.55(0.32, 0.94)

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

1195899(552115, 2590357)

852459(581610, 1249440)

1.40(0.59, 3.32)

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

4778590(2571795, 8878980)

2596583(1969141, 3423951)

1.84(0.94, 3.62)

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

7316965(4930528, 10858466)

5437290(4395135, 6726555)

1.35(0.86, 2.11)

Day 57

Vaccine

Positive

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

2840(1447, 5575)

4027(3047, 5323)

0.71(0.34, 1.46)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

6497(2827, 14932)

4552(3211, 6453)

1.43(0.58, 3.54)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

7944(3075, 20525)

7701(5217, 11368)

1.03(0.37, 2.90)

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

5(5, 5)

5(5, 5)

0.98(0.94, 1.02)

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

104344(59705, 182357)

179380(122975, 261655)

0.58(0.29, 1.16)

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

463502(275148, 780794)

495267(355781, 689438)

0.94(0.50, 1.75)

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

Not Hispanic or Latino vs Hispanic or Latino

787311(464021, 1335841)

705202(543308, 915337)

1.12(0.62, 2.02)

Day 57

Placebo

Positive

Live virus-nAb MN50

Not Hispanic or Latino vs Hispanic or Latino

620(316, 1216)

676(475, 960)

0.92(0.43, 1.95)

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

Not Hispanic or Latino vs Hispanic or Latino

668(366, 1221)

590(389, 894)

1.13(0.53, 2.40)

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

Not Hispanic or Latino vs Hispanic or Latino

1601(840, 3053)

2116(1483, 3019)

0.76(0.37, 1.57)

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.01(0.99, 1.02)

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

5(5, 5)

5(5, 5)

1.00(0.97, 1.03)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

5(5, 5)

5(5, 5)

0.96(0.93, 0.99)

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

5(5, 5)

5(5, 5)

1.01(0.97, 1.05)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

5(5, 5)

5(5, 5)

1.01(0.99, 1.03)

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

5(5, 5)

5(5, 5)

0.97(0.92, 1.03)

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.01)

Day 1

Placebo

Positive

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

5(5, 5)

5(5, 5)

1.00(0.93, 1.07)

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

26265(21332, 32338)

20435(15720, 26563)

1.29(0.92, 1.80)

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

28266(23127, 34547)

21316(17355, 26183)

1.33(0.99, 1.77)

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

49851(42322, 58718)

40078(33406, 48082)

1.24(0.97, 1.59)

Day 29

Vaccine

Negative

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

159(132, 191)

134(109, 163)

1.19(0.91, 1.56)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

114(93, 140)

94(73, 120)

1.21(0.88, 1.68)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

215(173, 266)

201(158, 256)

1.07(0.77, 1.47)

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

35869(23611, 54493)

41081(26678, 63260)

0.87(0.48, 1.59)

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

38777(25716, 58473)

41836(28084, 62323)

0.93(0.52, 1.64)

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

76818(53914, 109452)

78012(60301, 100925)

0.98(0.64, 1.53)

Day 29

Vaccine

Positive

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

172(123, 241)

225(154, 327)

0.77(0.46, 1.27)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

162(109, 241)

180(119, 273)

0.90(0.51, 1.60)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

300(192, 467)

322(217, 476)

0.93(0.52, 1.68)

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

0.99(0.98, 1.01)

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

5(5, 5)

5(5, 5)

1.02(0.97, 1.08)

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

5(5, 6)

5(5, 5)

1.06(0.95, 1.18)

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

13290(8770, 20139)

12123(8528, 17232)

1.10(0.64, 1.89)

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

11123(7688, 16091)

13408(9733, 18472)

0.83(0.51, 1.35)

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

19291(14336, 25958)

19223(14987, 24655)

1.00(0.68, 1.48)

Day 29

Placebo

Positive

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

93(65, 133)

86(69, 107)

1.08(0.71, 1.65)

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

52(35, 78)

52(37, 72)

1.02(0.61, 1.70)

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

163(100, 265)

136(101, 185)

1.20(0.67, 2.12)

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

456661(352451, 591684)

317210(238463, 421960)

1.44(0.98, 2.12)

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

1176305(967228, 1430578)

891811(709246, 1121369)

1.32(0.98, 1.78)

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

2475664(2085297, 2939107)

2144694(1786247, 2575069)

1.15(0.90, 1.48)

Day 57

Vaccine

Negative

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

1521(1191, 1943)

1295(1015, 1651)

1.17(0.83, 1.66)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

1766(1369, 2279)

1795(1297, 2483)

0.98(0.65, 1.49)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

3292(2526, 4290)

2296(1766, 2986)

1.43(0.99, 2.08)

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

837677(501685, 1398693)

937217(575113, 1527308)

0.89(0.44, 1.81)

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

2618440(1810493, 3786941)

2656286(1746143, 4040823)

0.99(0.56, 1.72)

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

5117900(3826248, 6845583)

6156573(4667493, 8120716)

0.83(0.56, 1.24)

Day 57

Vaccine

Positive

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

4697(3331, 6625)

2799(1834, 4272)

1.68(0.97, 2.89)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

4043(2544, 6427)

5318(3282, 8614)

0.76(0.39, 1.48)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

9026(5558, 14656)

6655(3873, 11436)

1.36(0.66, 2.80)

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

5(5, 6)

5(5, 5)

1.04(0.97, 1.12)

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

White Non-Hispanic vs Communities of Color

156472(94794, 258283)

148554(100902, 218709)

1.05(0.56, 1.98)

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

White Non-Hispanic vs Communities of Color

516772(332400, 803410)

440850(322338, 602935)

1.17(0.68, 2.01)

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

White Non-Hispanic vs Communities of Color

735886(529644, 1022438)

722847(510073, 1024378)

1.02(0.63, 1.64)

Day 57

Placebo

Positive

Live virus-nAb MN50

White Non-Hispanic vs Communities of Color

646(402, 1039)

642(415, 992)

1.01(0.53, 1.92)

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

White Non-Hispanic vs Communities of Color

549(308, 976)

564(377, 844)

0.97(0.48, 1.97)

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

White Non-Hispanic vs Communities of Color

2012(1253, 3231)

2027(1377, 2983)

0.99(0.54, 1.83)

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(0.99, 1.01)

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Live virus-nAb MN50

Not at-risk vs At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

Not at-risk vs At-risk

5(5, 5)

5(5, 5)

1.01(0.99, 1.03)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

Not at-risk vs At-risk

5(5, 5)

5(5, 5)

0.99(0.97, 1.01)

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Live virus-nAb MN50

Not at-risk vs At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

Not at-risk vs At-risk

5(5, 5)

5(5, 5)

1.00(0.97, 1.04)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

Not at-risk vs At-risk

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Live virus-nAb MN50

Not at-risk vs At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

Not at-risk vs At-risk

5(5, 5)

5(5, 5)

1.03(0.99, 1.07)

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

Not at-risk vs At-risk

5(5, 5)

5(5, 5)

0.97(0.93, 1.01)

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(0.99, 1.00)

Day 1

Placebo

Positive

Live virus-nAb MN50

Not at-risk vs At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

Not at-risk vs At-risk

5(5, 5)

5(5, 5)

0.98(0.94, 1.03)

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

Not at-risk vs At-risk

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

Not at-risk vs At-risk

24877(21066, 29377)

23982(19654, 29263)

1.04(0.80, 1.35)

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

25704(21957, 30089)

24445(20461, 29205)

1.05(0.83, 1.34)

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

48231(42255, 55054)

45607(39327, 52889)

1.06(0.86, 1.30)

Day 29

Vaccine

Negative

Live virus-nAb MN50

Not at-risk vs At-risk

148(129, 170)

150(127, 178)

0.98(0.79, 1.23)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

Not at-risk vs At-risk

107(90, 127)

106(87, 129)

1.01(0.78, 1.32)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

Not at-risk vs At-risk

198(166, 236)

224(183, 274)

0.88(0.67, 1.16)

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

Not at-risk vs At-risk

42911(30641, 60095)

37661(25792, 54990)

1.14(0.68, 1.90)

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

41011(31745, 52980)

40204(28724, 56272)

1.02(0.66, 1.57)

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

92863(74600, 115598)

76599(58477, 100336)

1.21(0.85, 1.73)

Day 29

Vaccine

Positive

Live virus-nAb MN50

Not at-risk vs At-risk

233(179, 303)

203(147, 279)

1.15(0.76, 1.74)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

Not at-risk vs At-risk

197(142, 273)

165(117, 233)

1.19(0.74, 1.93)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

Not at-risk vs At-risk

345(247, 481)

335(235, 477)

1.03(0.63, 1.68)

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.01(0.99, 1.03)

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Live virus-nAb MN50

Not at-risk vs At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

Not at-risk vs At-risk

5(5, 5)

5(5, 5)

1.00(0.96, 1.05)

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

Not at-risk vs At-risk

5(5, 5)

5(5, 6)

0.97(0.91, 1.03)

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

Not at-risk vs At-risk

14147(10032, 19949)

11688(8474, 16119)

1.21(0.75, 1.95)

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

14796(10943, 20005)

11162(8329, 14958)

1.33(0.86, 2.04)

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

22387(18015, 27820)

16930(13432, 21339)

1.32(0.95, 1.83)

Day 29

Placebo

Positive

Live virus-nAb MN50

Not at-risk vs At-risk

102(78, 133)

84(65, 109)

1.22(0.84, 1.77)

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

Not at-risk vs At-risk

65(48, 88)

47(35, 64)

1.37(0.88, 2.12)

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

Not at-risk vs At-risk

161(114, 227)

147(104, 208)

1.09(0.67, 1.78)

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

Not at-risk vs At-risk

380309(309658, 467078)

410590(323795, 520651)

0.93(0.67, 1.27)

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

1138126(955524, 1355623)

1051406(878650, 1258128)

1.08(0.84, 1.40)

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

2291768(1963317, 2675167)

2371172(2036164, 2761300)

0.97(0.77, 1.21)

Day 57

Vaccine

Negative

Live virus-nAb MN50

Not at-risk vs At-risk

1666(1386, 2002)

1397(1125, 1733)

1.19(0.90, 1.59)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

Not at-risk vs At-risk

1699(1361, 2122)

1816(1427, 2310)

0.94(0.67, 1.30)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

Not at-risk vs At-risk

2822(2287, 3482)

2929(2317, 3703)

0.96(0.70, 1.32)

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

Not at-risk vs At-risk

996972(698286, 1423418)

818251(531355, 1260049)

1.22(0.69, 2.15)

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

2930696(2188863, 3923945)

2602083(1910844, 3543374)

1.13(0.73, 1.73)

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

5733510(4581393, 7175359)

5823208(4625122, 7331644)

0.98(0.71, 1.37)

Day 57

Vaccine

Positive

Live virus-nAb MN50

Not at-risk vs At-risk

3514(2650, 4659)

3939(2917, 5320)

0.89(0.59, 1.35)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

Not at-risk vs At-risk

4717(3090, 7201)

4760(3065, 7393)

0.99(0.53, 1.85)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

Not at-risk vs At-risk

8763(5969, 12866)

7505(4676, 12045)

1.17(0.63, 2.16)

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Live virus-nAb MN50

Not at-risk vs At-risk

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

Not at-risk vs At-risk

5(5, 5)

5(5, 5)

0.98(0.94, 1.02)

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

Not at-risk vs At-risk

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

Not at-risk vs At-risk

198664(137806, 286399)

138210(92120, 207361)

1.44(0.83, 2.50)

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

Not at-risk vs At-risk

599785(434982, 827028)

426627(305619, 595547)

1.41(0.88, 2.26)

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

Not at-risk vs At-risk

980255(758629, 1266628)

659233(502270, 865248)

1.49(1.01, 2.19)

Day 57

Placebo

Positive

Live virus-nAb MN50

Not at-risk vs At-risk

770(536, 1107)

549(380, 794)

1.40(0.83, 2.37)

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

Not at-risk vs At-risk

811(547, 1203)

455(289, 715)

1.78(0.97, 3.28)

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

Not at-risk vs At-risk

1695(1156, 2485)

1720(1159, 2554)

0.99(0.57, 1.71)

Day 1

Vaccine

Negative

Anti N IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Anti RBD IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(0.99, 1.02)

Day 1

Vaccine

Negative

Anti Spike IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Live virus-nAb MN50

Male vs Female

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID50

Male vs Female

5(5, 5)

5(5, 5)

1.02(0.99, 1.04)

Day 1

Vaccine

Negative

Pseudovirus-nAb ID80

Male vs Female

5(5, 5)

5(5, 5)

0.97(0.95, 1.00)

Day 1

Vaccine

Positive

Anti N IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti RBD IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Anti Spike IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Live virus-nAb MN50

Male vs Female

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID50

Male vs Female

5(5, 5)

5(5, 5)

1.02(0.98, 1.06)

Day 1

Vaccine

Positive

Pseudovirus-nAb ID80

Male vs Female

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti N IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti RBD IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Anti Spike IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Live virus-nAb MN50

Male vs Female

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Negative

Pseudovirus-nAb ID50

Male vs Female

5(5, 5)

5(5, 5)

1.00(0.98, 1.02)

Day 1

Placebo

Negative

Pseudovirus-nAb ID80

Male vs Female

5(5, 5)

5(5, 5)

1.00(0.94, 1.06)

Day 1

Placebo

Positive

Anti N IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti RBD IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Anti Spike IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.01)

Day 1

Placebo

Positive

Live virus-nAb MN50

Male vs Female

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 1

Placebo

Positive

Pseudovirus-nAb ID50

Male vs Female

5(5, 5)

5(5, 5)

1.03(0.98, 1.09)

Day 1

Placebo

Positive

Pseudovirus-nAb ID80

Male vs Female

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 29

Vaccine

Negative

Anti N IgG (IU/ml)

Male vs Female

24675(20170, 30188)

23651(18727, 29871)

1.04(0.76, 1.43)

Day 29

Vaccine

Negative

Anti RBD IgG (IU/ml)

Male vs Female

23270(19286, 28078)

26846(21982, 32786)

0.87(0.65, 1.15)

Day 29

Vaccine

Negative

Anti Spike IgG (IU/ml)

Male vs Female

48501(41686, 56429)

43637(36731, 51842)

1.11(0.88, 1.41)

Day 29

Vaccine

Negative

Live virus-nAb MN50

Male vs Female

143(121, 168)

159(130, 196)

0.90(0.69, 1.17)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID50

Male vs Female

105(86, 127)

108(85, 136)

0.97(0.71, 1.33)

Day 29

Vaccine

Negative

Pseudovirus-nAb ID80

Male vs Female

208(168, 256)

230(183, 289)

0.90(0.66, 1.24)

Day 29

Vaccine

Positive

Anti N IgG (IU/ml)

Male vs Female

40523(26281, 62486)

37143(24890, 55427)

1.09(0.60, 1.97)

Day 29

Vaccine

Positive

Anti RBD IgG (IU/ml)

Male vs Female

39866(27351, 58108)

41050(28647, 58823)

0.97(0.58, 1.64)

Day 29

Vaccine

Positive

Anti Spike IgG (IU/ml)

Male vs Female

76435(56772, 102910)

85380(63299, 115163)

0.90(0.58, 1.38)

Day 29

Vaccine

Positive

Live virus-nAb MN50

Male vs Female

206(144, 296)

214(153, 299)

0.96(0.59, 1.57)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID50

Male vs Female

176(117, 264)

170(120, 241)

1.03(0.60, 1.78)

Day 29

Vaccine

Positive

Pseudovirus-nAb ID80

Male vs Female

340(219, 529)

333(241, 462)

1.02(0.59, 1.77)

Day 29

Placebo

Negative

Anti N IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Anti RBD IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.01)

Day 29

Placebo

Negative

Anti Spike IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Live virus-nAb MN50

Male vs Female

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 29

Placebo

Negative

Pseudovirus-nAb ID50

Male vs Female

5(5, 5)

5(5, 5)

1.02(0.97, 1.07)

Day 29

Placebo

Negative

Pseudovirus-nAb ID80

Male vs Female

5(5, 5)

5(5, 6)

0.95(0.85, 1.05)

Day 29

Placebo

Positive

Anti N IgG (IU/ml)

Male vs Female

10162(6967, 14822)

16104(11768, 22037)

0.63(0.38, 1.04)

Day 29

Placebo

Positive

Anti RBD IgG (IU/ml)

Male vs Female

11046(8047, 15164)

13373(9368, 19089)

0.83(0.50, 1.37)

Day 29

Placebo

Positive

Anti Spike IgG (IU/ml)

Male vs Female

16347(12596, 21215)

21013(16320, 27055)

0.78(0.53, 1.15)

Day 29

Placebo

Positive

Live virus-nAb MN50

Male vs Female

85(63, 115)

92(71, 119)

0.93(0.62, 1.38)

Day 29

Placebo

Positive

Pseudovirus-nAb ID50

Male vs Female

49(34, 70)

54(39, 75)

0.91(0.56, 1.49)

Day 29

Placebo

Positive

Pseudovirus-nAb ID80

Male vs Female

147(101, 215)

155(105, 229)

0.95(0.55, 1.64)

Day 57

Vaccine

Negative

Anti N IgG (IU/ml)

Male vs Female

400820(314179, 511355)

403945(306778, 531888)

0.99(0.68, 1.44)

Day 57

Vaccine

Negative

Anti RBD IgG (IU/ml)

Male vs Female

1145402(944407, 1389174)

989572(809739, 1209345)

1.16(0.87, 1.54)

Day 57

Vaccine

Negative

Anti Spike IgG (IU/ml)

Male vs Female

2398857(2045123, 2813774)

2287936(1911349, 2738720)

1.05(0.82, 1.34)

Day 57

Vaccine

Negative

Live virus-nAb MN50

Male vs Female

1406(1123, 1760)

1543(1209, 1968)

0.91(0.65, 1.27)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID50

Male vs Female

1667(1313, 2116)

1945(1450, 2608)

0.86(0.59, 1.25)

Day 57

Vaccine

Negative

Pseudovirus-nAb ID80

Male vs Female

2894(2310, 3625)

2907(2163, 3906)

1.00(0.68, 1.45)

Day 57

Vaccine

Positive

Anti N IgG (IU/ml)

Male vs Female

880697(553974, 1400115)

837070(508960, 1376704)

1.05(0.53, 2.09)

Day 57

Vaccine

Positive

Anti RBD IgG (IU/ml)

Male vs Female

2676980(1849659, 3874348)

2687473(1984480, 3639499)

1.00(0.62, 1.61)

Day 57

Vaccine

Positive

Anti Spike IgG (IU/ml)

Male vs Female

5513577(4222152, 7200008)

6154788(4871860, 7775556)

0.90(0.63, 1.28)

Day 57

Vaccine

Positive

Live virus-nAb MN50

Male vs Female

3595(2579, 5011)

4117(2977, 5694)

0.87(0.54, 1.40)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID50

Male vs Female

4659(3056, 7103)

4857(2726, 8655)

0.96(0.47, 1.97)

Day 57

Vaccine

Positive

Pseudovirus-nAb ID80

Male vs Female

8107(5219, 12593)

7468(4045, 13788)

1.09(0.51, 2.31)

Day 57

Placebo

Negative

Anti N IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti RBD IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Anti Spike IgG (IU/ml)

Male vs Female

10(10, 10)

10(10, 10)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Live virus-nAb MN50

Male vs Female

31(31, 31)

31(31, 31)

1.00(1.00, 1.00)

Day 57

Placebo

Negative

Pseudovirus-nAb ID50

Male vs Female

5(5, 5)

5(5, 5)

1.03(0.97, 1.09)

Day 57

Placebo

Negative

Pseudovirus-nAb ID80

Male vs Female

5(5, 5)

5(5, 5)

1.00(1.00, 1.00)

Day 57

Placebo

Positive

Anti N IgG (IU/ml)

Male vs Female

127886(80843, 202302)

191945(124873, 295044)

0.67(0.35, 1.26)

Day 57

Placebo

Positive

Anti RBD IgG (IU/ml)

Male vs Female

433107(297108, 631359)

509328(355055, 730634)

0.85(0.50, 1.45)

Day 57

Placebo

Positive

Anti Spike IgG (IU/ml)

Male vs Female

735382(548585, 985783)

706692(517642, 964786)

1.04(0.66, 1.65)

Day 57

Placebo

Positive

Live virus-nAb MN50

Male vs Female

546(359, 832)

675(455, 1001)

0.81(0.45, 1.45)

Day 57

Placebo

Positive

Pseudovirus-nAb ID50

Male vs Female

537(320, 900)

498(317, 783)

1.08(0.53, 2.20)

Day 57

Placebo

Positive

Pseudovirus-nAb ID80

Male vs Female

1609(1018, 2543)

1885(1264, 2810)

0.85(0.46, 1.58)

Table 8a. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by All participants

Group

Visit

Baseline COVID

Marker

Comparison

Responder

% 2-Fold Rise

% 4-Fold Rise

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

99.7%(99.2%, 100.3%)

100%(100%, 100%)

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

51.3%(46.8%, 55.8%)

65.6%(61.3%, 69.9%)

50.5%(46%, 55%)

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

66.3%(62%, 70.6%)

86.9%(82.5%, 91.2%)

81.9%(78.4%, 85.4%)

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

80%(76.3%, 83.7%)

94.1%(90.5%, 97.8%)

88.6%(84.4%, 92.7%)

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

28.8%(18%, 39.6%)

24.1%(13.3%, 34.9%)

30.1%(19.4%, 40.8%)

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

24.2%(13.5%, 35%)

14.1%(6.8%, 21.3%)

22.7%(13.5%, 32%)

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

7.8%(-1%, 16.6%)

5.2%(0.8%, 9.6%)

7.5%(1.2%, 13.7%)

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

88.4%(85.4%, 91.4%)

94.3%(92.2%, 96.4%)

88.2%(85.2%, 91.2%)

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

95.5%(93.8%, 97.2%)

97.4%(94.1%, 100.6%)

97.8%(96.8%, 98.8%)

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

97.6%(96.2%, 98.9%)

99.8%(99.5%, 100%)

99.2%(98.5%, 99.9%)

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

22.1%(14.4%, 29.7%)

12.8%(6.9%, 18.7%)

23.4%(15.6%, 31.2%)

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

12.7%(5.6%, 19.8%)

3%(-0.3%, 6.4%)

9.5%(3.4%, 15.7%)

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2.4%(-1.1%, 5.9%)

0.3%(-0.1%, 0.8%)

3%(-0.2%, 6.2%)

Table 8b. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by Age

Group

Visit

Baseline COVID

Marker

Comparison

Responder

% 2-Fold Rise

% 4-Fold Rise

Age < 65

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

47%(41.5%, 52.6%)

62.4%(57%, 67.7%)

46.2%(40.6%, 51.7%)

Age < 65

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

61.7%(56.3%, 67%)

84.8%(79.3%, 90.3%)

79%(74.6%, 83.5%)

Age < 65

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

76.9%(72.2%, 81.6%)

93%(88.4%, 97.7%)

86.6%(81.3%, 91.9%)

Age < 65

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

29%(15.8%, 42.2%)

25.3%(12%, 38.6%)

30.2%(17.1%, 43.2%)

Age < 65

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

26.5%(13.2%, 39.8%)

16.1%(7%, 25.1%)

25.4%(13.9%, 36.8%)

Age < 65

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

6.9%(-3.9%, 17.7%)

5.8%(0.4%, 11.3%)

7.6%(-0.1%, 15.2%)

Age < 65

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

87%(83.2%, 90.7%)

93.8%(91.2%, 96.4%)

86.9%(83.1%, 90.6%)

Age < 65

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

95.3%(93.2%, 97.4%)

96.7%(92.5%, 100.9%)

97.5%(96.2%, 98.8%)

Age < 65

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

97.1%(95.4%, 98.8%)

99.7%(99.4%, 100%)

99%(98.2%, 99.9%)

Age < 65

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

25.5%(16%, 34.9%)

14.8%(7.6%, 22.1%)

27.1%(17.5%, 36.7%)

Age < 65

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

15.3%(6.5%, 24.1%)

3.6%(-0.6%, 7.8%)

11.3%(3.7%, 19%)

Age < 65

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2.3%(-2%, 6.5%)

0%(0%, 0%)

3.4%(-0.6%, 7.3%)

Age >= 65

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

98.8%(96.4%, 101.2%)

100%(100%, 100%)

Age >= 65

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

66.9%(62.5%, 71.3%)

77.3%(73.4%, 81.3%)

66.5%(62.1%, 70.9%)

Age >= 65

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

83.5%(80%, 86.9%)

94.6%(90.7%, 98.5%)

92.5%(90%, 95%)

Age >= 65

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

91.5%(88.9%, 94.1%)

98.2%(97%, 99.5%)

95.9%(94%, 97.8%)

Age >= 65

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

28%(16.4%, 39.6%)

19.7%(9.3%, 30.1%)

29.9%(18.3%, 41.4%)

Age >= 65

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

15.6%(6.2%, 25.1%)

6.1%(1.7%, 10.5%)

12.4%(5%, 19.8%)

Age >= 65

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

11.5%(3.6%, 19.4%)

2.6%(-0.3%, 5.5%)

7.1%(1.8%, 12.4%)

Age >= 65

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

93.7%(91.4%, 96%)

96.3%(94.5%, 98.1%)

93%(90.6%, 95.4%)

Age >= 65

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.4%(94.7%, 98.2%)

99.7%(99.2%, 100.3%)

98.9%(97.9%, 99.9%)

Age >= 65

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

99.3%(98.6%, 99.9%)

100%(100%, 100%)

99.9%(99.6%, 100.1%)

Age >= 65

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

8.6%(2.5%, 14.6%)

4.7%(0.3%, 9.1%)

8.8%(2.4%, 15.2%)

Age >= 65

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

2.5%(-1.9%, 6.8%)

0.7%(-0.7%, 2%)

2.6%(-0.3%, 5.5%)

Age >= 65

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

3%(0.1%, 5.9%)

1.6%(-0.7%, 3.9%)

1.6%(-0.7%, 3.9%)

Table 8c. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by Risk for Severe Covid-19

Group

Visit

Baseline COVID

Marker

Comparison

Responder

% 2-Fold Rise

% 4-Fold Rise

At-risk

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

At-risk

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

98.9%(96.8%, 101.1%)

100%(100%, 100%)

At-risk

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

At-risk

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

51.9%(47.1%, 56.7%)

64.5%(59.8%, 69.1%)

50.5%(45.7%, 55.3%)

At-risk

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

64.6%(60%, 69.2%)

86.7%(82.2%, 91.2%)

79.8%(75.8%, 83.8%)

At-risk

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

79%(75%, 83%)

93.5%(91%, 95.9%)

88%(84.7%, 91.2%)

At-risk

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

At-risk

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

At-risk

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

At-risk

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

31.9%(19.7%, 44.1%)

19.5%(7.2%, 31.7%)

31.9%(19.7%, 44.1%)

At-risk

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

20.9%(9.2%, 32.5%)

11.6%(3.7%, 19.5%)

14.8%(4.5%, 25%)

At-risk

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

13.7%(3.2%, 24.2%)

1.7%(-4.8%, 8.2%)

3.1%(-4.7%, 11%)

At-risk

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

At-risk

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

At-risk

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

At-risk

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

88.9%(85.7%, 92%)

93.8%(91.3%, 96.3%)

88.2%(85%, 91.5%)

At-risk

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

92.9%(90.3%, 95.5%)

97.9%(96.4%, 99.4%)

95.7%(93.6%, 97.8%)

At-risk

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

97.3%(95.7%, 99%)

99.1%(98.1%, 100.1%)

98.8%(97.6%, 100%)

At-risk

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

At-risk

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

At-risk

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

At-risk

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

18.5%(10.4%, 26.6%)

9.2%(2.9%, 15.5%)

19.2%(11.1%, 27.3%)

At-risk

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

7.4%(0.5%, 14.2%)

0.3%(-2.3%, 2.8%)

5.3%(0.6%, 10.1%)

At-risk

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2.8%(-1.1%, 6.6%)

0.8%(-0.8%, 2.4%)

2.6%(-0.4%, 5.5%)

Not at-risk

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not at-risk

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not at-risk

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not at-risk

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

51.1%(45.2%, 56.9%)

66%(60.3%, 71.6%)

50.5%(44.6%, 56.4%)

Not at-risk

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

67%(61.4%, 72.6%)

86.9%(81.3%, 92.6%)

82.7%(78.1%, 87.3%)

Not at-risk

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

80.4%(75.5%, 85.2%)

94.5%(89.7%, 99.2%)

88.9%(83.4%, 94.3%)

Not at-risk

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not at-risk

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not at-risk

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not at-risk

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

27.6%(13.8%, 41.4%)

25.6%(11.9%, 39.3%)

29.3%(15.7%, 42.9%)

Not at-risk

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

25.2%(11.4%, 39%)

14.9%(5.6%, 24.1%)

25.3%(13.6%, 37%)

Not at-risk

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

6%(-5.1%, 17.1%)

6.4%(1%, 11.7%)

8.9%(1.2%, 16.7%)

Not at-risk

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not at-risk

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not at-risk

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not at-risk

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

88.2%(84.3%, 92.1%)

94.5%(91.8%, 97.2%)

88.2%(84.2%, 92.1%)

Not at-risk

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.5%(94.4%, 98.6%)

97.2%(92.9%, 101.6%)

98.6%(97.4%, 99.8%)

Not at-risk

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

97.6%(95.9%, 99.4%)

100%(100%, 100%)

99.4%(98.5%, 100.2%)

Not at-risk

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not at-risk

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not at-risk

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not at-risk

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

23.1%(13.4%, 32.8%)

13.9%(6.5%, 21.4%)

24.7%(14.8%, 34.6%)

Not at-risk

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

14.4%(5.3%, 23.4%)

3.9%(-0.4%, 8.2%)

10.8%(2.9%, 18.7%)

Not at-risk

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2.3%(-2.1%, 6.7%)

0.2%(-0.2%, 0.5%)

3.1%(-0.9%, 7.2%)

Table 8d. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by Age, Risk for Severe Covid-19

Group

Visit

Baseline COVID

Marker

Comparison

Responder

% 2-Fold Rise

% 4-Fold Rise

Age < 65 At-risk

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 At-risk

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 At-risk

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 At-risk

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

44.2%(37.4%, 51%)

57.7%(50.9%, 64.4%)

42%(35.2%, 48.8%)

Age < 65 At-risk

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

54.3%(47.4%, 61.1%)

84.6%(79.7%, 89.5%)

73.6%(67.5%, 79.6%)

Age < 65 At-risk

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

73%(66.9%, 79%)

91.4%(87.6%, 95.2%)

83.6%(78.5%, 88.7%)

Age < 65 At-risk

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 At-risk

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 At-risk

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 At-risk

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

28.6%(12.8%, 44.4%)

16.5%(0.5%, 32.5%)

27.4%(11.6%, 43.2%)

Age < 65 At-risk

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

21.9%(6.3%, 37.5%)

10.3%(-0.3%, 20.9%)

13.9%(0.2%, 27.7%)

Age < 65 At-risk

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

8.7%(-5.1%, 22.6%)

1.2%(-8.2%, 10.6%)

-0.3%(-11.1%, 10.6%)

Age < 65 At-risk

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 At-risk

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 At-risk

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 At-risk

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

85.9%(81.2%, 90.7%)

91.8%(87.9%, 95.7%)

85.4%(80.5%, 90.3%)

Age < 65 At-risk

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

91.5%(87.7%, 95.4%)

96.8%(94.3%, 99.2%)

93.3%(89.8%, 96.8%)

Age < 65 At-risk

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

95.5%(92.7%, 98.3%)

98.6%(96.9%, 100.2%)

98%(96%, 100%)

Age < 65 At-risk

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 At-risk

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 At-risk

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 At-risk

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

21.5%(10.9%, 32.2%)

13.8%(4.8%, 22.7%)

22.6%(11.8%, 33.4%)

Age < 65 At-risk

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

9.6%(0.6%, 18.6%)

0.4%(-3.5%, 4.2%)

6.7%(0%, 13.4%)

Age < 65 At-risk

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

1.2%(-3.5%, 5.9%)

0%(0%, 0%)

2.6%(-1.1%, 6.3%)

Age < 65 Not at-risk

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Not at-risk

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Not at-risk

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Not at-risk

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

47.8%(41%, 54.5%)

63.6%(57%, 70.1%)

47.2%(40.4%, 54%)

Age < 65 Not at-risk

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

63.6%(57%, 70.1%)

84.9%(78.3%, 91.6%)

80.5%(75.1%, 85.8%)

Age < 65 Not at-risk

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

77.9%(72.2%, 83.6%)

93.5%(87.9%, 99.1%)

87.4%(81.1%, 93.8%)

Age < 65 Not at-risk

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Not at-risk

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Not at-risk

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Not at-risk

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

29%(12.9%, 45.1%)

27.5%(11.3%, 43.7%)

30.8%(14.8%, 46.7%)

Age < 65 Not at-risk

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

27.6%(11.3%, 43.8%)

17.6%(6.6%, 28.6%)

28.3%(14.4%, 42.2%)

Age < 65 Not at-risk

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

6.5%(-6.6%, 19.6%)

7.1%(0.8%, 13.5%)

9.7%(0.5%, 18.9%)

Age < 65 Not at-risk

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Not at-risk

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Not at-risk

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Not at-risk

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

87.2%(82.7%, 91.8%)

94.3%(91.2%, 97.4%)

87.2%(82.7%, 91.8%)

Age < 65 Not at-risk

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.3%(93.8%, 98.7%)

96.8%(91.7%, 101.8%)

98.6%(97.2%, 99.9%)

Age < 65 Not at-risk

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

97.5%(95.5%, 99.5%)

100%(100%, 100%)

99.3%(98.3%, 100.3%)

Age < 65 Not at-risk

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Not at-risk

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Not at-risk

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Not at-risk

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

26.4%(14.9%, 38%)

15.1%(6.3%, 23.9%)

28.2%(16.5%, 39.9%)

Age < 65 Not at-risk

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

16.7%(6%, 27.5%)

4.4%(-0.7%, 9.6%)

12.4%(3%, 21.9%)

Age < 65 Not at-risk

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2.5%(-2.7%, 7.8%)

0%(0%, 0%)

3.5%(-1.3%, 8.4%)

Age >= 65 At-risk

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 At-risk

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

97.6%(93%, 102.3%)

100%(100%, 100%)

Age >= 65 At-risk

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 At-risk

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

63.3%(56.9%, 69.6%)

74.5%(68.7%, 80.3%)

63%(56.7%, 69.3%)

Age >= 65 At-risk

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

79.7%(74.4%, 85%)

90.5%(83%, 98.1%)

89%(84.8%, 93.1%)

Age >= 65 At-risk

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

87.9%(83.6%, 92.3%)

96.5%(94.1%, 99%)

94.4%(91.3%, 97.5%)

Age >= 65 At-risk

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 At-risk

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 At-risk

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 At-risk

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

38.3%(19.8%, 56.7%)

25.2%(7.4%, 43%)

40.7%(22.4%, 59.1%)

Age >= 65 At-risk

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

18.4%(2.7%, 34.2%)

14.2%(3.6%, 24.8%)

16.2%(2.8%, 29.6%)

Age >= 65 At-risk

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

23.7%(9.1%, 38.2%)

2.5%(-2.4%, 7.3%)

9.9%(0.8%, 19.1%)

Age >= 65 At-risk

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 At-risk

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 At-risk

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 At-risk

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

93.2%(90%, 96.5%)

96.8%(94.4%, 99.1%)

92.4%(89%, 95.8%)

Age >= 65 At-risk

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

94.9%(92%, 97.9%)

99.5%(98.4%, 100.5%)

99.2%(98%, 100.4%)

Age >= 65 At-risk

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 At-risk

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 At-risk

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 At-risk

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 At-risk

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

12.2%(0.8%, 23.5%)

-0.2%(-5.5%, 5.1%)

12.2%(0.8%, 23.5%)

Age >= 65 At-risk

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

2.7%(-6.7%, 12.1%)

0%(0%, 0%)

2.5%(-2.4%, 7.3%)

Age >= 65 At-risk

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

6.1%(-0.8%, 12.9%)

2.5%(-2.4%, 7.3%)

2.5%(-2.4%, 7.3%)

Age >= 65 Not at-risk

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Not at-risk

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Not at-risk

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Not at-risk

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

70.7%(64.5%, 76.9%)

80.3%(74.8%, 85.7%)

70.1%(63.9%, 76.4%)

Age >= 65 Not at-risk

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

87.4%(82.9%, 91.9%)

98.9%(97.5%, 100.2%)

96.1%(93.5%, 98.7%)

Age >= 65 Not at-risk

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

95.2%(92.4%, 98.1%)

100%(100%, 100%)

97.5%(95.3%, 99.7%)

Age >= 65 Not at-risk

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Not at-risk

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Not at-risk

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Not at-risk

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

21.5%(6.6%, 36.4%)

16.6%(3.9%, 29.3%)

23.1%(8.1%, 38%)

Age >= 65 Not at-risk

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

13.9%(2%, 25.9%)

1.1%(-1.1%, 3.3%)

10.2%(1.4%, 18.9%)

Age >= 65 Not at-risk

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

3.9%(-5%, 12.8%)

2.6%(-1.1%, 6.3%)

5.3%(-1.2%, 11.8%)

Age >= 65 Not at-risk

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Not at-risk

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Not at-risk

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Not at-risk

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

94.1%(90.9%, 97.3%)

95.8%(93.1%, 98.6%)

93.6%(90.2%, 97%)

Age >= 65 Not at-risk

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

98%(96.2%, 99.8%)

100%(100%, 100%)

98.6%(97%, 100.2%)

Age >= 65 Not at-risk

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

98.5%(97.2%, 99.8%)

100%(100%, 100%)

99.7%(99.1%, 100.3%)

Age >= 65 Not at-risk

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Not at-risk

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Not at-risk

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Not at-risk

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

6.4%(-0.4%, 13.2%)

7.9%(1.7%, 14.1%)

6.8%(-0.9%, 14.5%)

Age >= 65 Not at-risk

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

2.6%(-1.1%, 6.3%)

1.1%(-1.1%, 3.3%)

2.6%(-1.1%, 6.3%)

Age >= 65 Not at-risk

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

1.1%(-1.1%, 3.3%)

1.1%(-1.1%, 3.3%)

1.1%(-1.1%, 3.3%)

Table 8e. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by Sex

Group

Visit

Baseline COVID

Marker

Comparison

Responder

% 2-Fold Rise

% 4-Fold Rise

Female

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Female

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

99.5%(98.5%, 100.5%)

100%(100%, 100%)

Female

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Female

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

50.2%(44.2%, 56.2%)

65.6%(59.8%, 71.3%)

49.3%(43.3%, 55.3%)

Female

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

66.7%(61.1%, 72.3%)

85.7%(78.7%, 92.7%)

80.3%(75.5%, 85.2%)

Female

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

79%(73.9%, 84.1%)

94.8%(92%, 97.5%)

89.6%(85.9%, 93.3%)

Female

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Female

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Female

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Female

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

32.6%(18.5%, 46.7%)

23.1%(8.3%, 38%)

32.9%(18.9%, 47%)

Female

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

22.3%(7.4%, 37.2%)

13.7%(3.5%, 23.9%)

27.5%(15.4%, 39.7%)

Female

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2%(-10.4%, 14.5%)

4.2%(-0.5%, 8.8%)

6.5%(-2.5%, 15.6%)

Female

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Female

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Female

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Female

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

87.4%(83.3%, 91.6%)

93.6%(90.6%, 96.6%)

87.3%(83.2%, 91.5%)

Female

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

95%(92.6%, 97.5%)

96.1%(90.3%, 102%)

97.4%(95.9%, 99%)

Female

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

98.5%(97%, 100%)

100%(100%, 100%)

99.6%(98.8%, 100.4%)

Female

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Female

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Female

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Female

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

27%(16.5%, 37.6%)

15.6%(7.3%, 23.8%)

29%(18.2%, 39.8%)

Female

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

14.6%(5.5%, 23.7%)

3.4%(-1.8%, 8.6%)

9.5%(2.1%, 16.8%)

Female

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

4.6%(-0.8%, 9.9%)

0.3%(-0.3%, 0.9%)

4.8%(-0.5%, 10.1%)

Male

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Male

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Male

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Male

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

52.7%(45.9%, 59.5%)

65.6%(59%, 72.1%)

52.1%(45.2%, 58.9%)

Male

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

65.8%(59.2%, 72.5%)

88.3%(83.8%, 92.9%)

83.9%(78.9%, 89%)

Male

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

81.3%(75.9%, 86.7%)

93.4%(86.1%, 100.8%)

87.4%(79.4%, 95.5%)

Male

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Male

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Male

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Male

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

22.7%(6%, 39.4%)

25%(9%, 40.9%)

25.6%(9.1%, 42%)

Male

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

25.9%(10.1%, 41.7%)

14.2%(3.6%, 24.7%)

16%(2.1%, 29.8%)

Male

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

15.2%(3.2%, 27.2%)

6.9%(-1.5%, 15.3%)

8.3%(-0.2%, 16.9%)

Male

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Male

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Male

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Male

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

89.7%(85.4%, 93.9%)

95.2%(92.5%, 98%)

89.3%(85%, 93.6%)

Male

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.2%(93.8%, 98.5%)

98.8%(97.7%, 100%)

98.3%(97%, 99.6%)

Male

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

96.4%(94%, 98.8%)

99.5%(98.9%, 100.1%)

98.7%(97.5%, 99.9%)

Male

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Male

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Male

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Male

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

14.9%(4.5%, 25.4%)

8.9%(0.8%, 16.9%)

15.4%(4.9%, 25.9%)

Male

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

10.1%(-1.1%, 21.3%)

2.4%(-0.7%, 5.6%)

10%(-0.5%, 20.5%)

Male

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

-0.7%(-3.5%, 2.2%)

0.3%(-0.3%, 1%)

0.3%(-0.3%, 1%)

Table 8f. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by Age, sex

Group

Visit

Baseline COVID

Marker

Comparison

Responder

% 2-Fold Rise

% 4-Fold Rise

Age < 65 Female

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Female

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Female

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Female

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

45.8%(38.4%, 53.2%)

62.2%(55%, 69.4%)

44.8%(37.4%, 52.3%)

Age < 65 Female

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

62.3%(55.3%, 69.3%)

83.2%(74.4%, 92%)

77.1%(71%, 83.2%)

Age < 65 Female

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

75.1%(68.7%, 81.6%)

93.9%(90.4%, 97.3%)

87.5%(82.9%, 92.2%)

Age < 65 Female

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Female

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Female

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Female

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

29.7%(12.6%, 46.8%)

21.1%(3.1%, 39.1%)

29.7%(12.6%, 46.8%)

Age < 65 Female

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

21.8%(3.7%, 39.9%)

14.3%(2%, 26.7%)

29.6%(15%, 44.2%)

Age < 65 Female

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

-2.2%(-17.3%, 13%)

4.5%(-1%, 10.1%)

5.9%(-4.9%, 16.8%)

Age < 65 Female

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Female

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Female

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Female

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

86%(80.8%, 91.2%)

93.1%(89.3%, 96.8%)

86%(80.8%, 91.2%)

Age < 65 Female

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

94.6%(91.6%, 97.7%)

95.1%(87.7%, 102.5%)

97%(95.1%, 98.9%)

Age < 65 Female

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

98.3%(96.4%, 100.2%)

100%(100%, 100%)

99.5%(98.5%, 100.5%)

Age < 65 Female

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Female

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Female

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Female

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

30.2%(17.5%, 42.8%)

18%(8.2%, 27.8%)

32.8%(19.9%, 45.6%)

Age < 65 Female

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

16.7%(5.8%, 27.6%)

4.1%(-2.2%, 10.3%)

10.9%(2.1%, 19.7%)

Age < 65 Female

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

4.8%(-1.6%, 11.2%)

0%(0%, 0%)

5.4%(-0.9%, 11.6%)

Age < 65 Male

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Male

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Male

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Male

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

48.6%(40.1%, 57.1%)

62.6%(54.4%, 70.7%)

47.9%(39.4%, 56.3%)

Age < 65 Male

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

60.8%(52.5%, 69.2%)

86.8%(81.3%, 92.2%)

81.5%(75.2%, 87.9%)

Age < 65 Male

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

79.1%(72.4%, 85.9%)

91.9%(82.3%, 101.5%)

85.4%(74.9%, 95.8%)

Age < 65 Male

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Male

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Male

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Male

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

26.6%(5.6%, 47.6%)

30.5%(10.3%, 50.7%)

29.8%(9.2%, 50.4%)

Age < 65 Male

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

31.6%(11.5%, 51.8%)

18.2%(4.2%, 32.2%)

19.2%(1.3%, 37.1%)

Age < 65 Male

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

19.3%(3.7%, 34.9%)

8.4%(-2.8%, 19.5%)

9.2%(-2%, 20.5%)

Age < 65 Male

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Male

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Male

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Male

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

88.3%(82.9%, 93.6%)

94.6%(91.1%, 98.1%)

88%(82.6%, 93.4%)

Age < 65 Male

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.1%(93.3%, 99%)

98.7%(97.2%, 100.2%)

98.2%(96.5%, 99.8%)

Age < 65 Male

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

95.6%(92.5%, 98.7%)

99.3%(98.6%, 100.1%)

98.4%(96.9%, 100%)

Age < 65 Male

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Male

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Male

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Male

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

18.1%(4.5%, 31.8%)

9.9%(-0.6%, 20.3%)

18.1%(4.5%, 31.8%)

Age < 65 Male

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

13.4%(-1.3%, 28%)

2.8%(-1.4%, 6.9%)

12.5%(-1.2%, 26.3%)

Age < 65 Male

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

-1.7%(-5%, 1.6%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Female

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Female

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

97.7%(93.1%, 102.2%)

100%(100%, 100%)

Age >= 65 Female

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Female

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

66.4%(60.4%, 72.3%)

78.1%(72.8%, 83.3%)

65.9%(59.9%, 71.8%)

Age >= 65 Female

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

83.1%(78.4%, 87.7%)

94.9%(90%, 99.9%)

92.3%(89%, 95.6%)

Age >= 65 Female

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

93.3%(90.2%, 96.4%)

98%(96.3%, 99.8%)

97%(94.9%, 99.1%)

Age >= 65 Female

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Female

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Female

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Female

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

40%(24.4%, 55.5%)

27.6%(13.2%, 42%)

41.9%(26.5%, 57.3%)

Age >= 65 Female

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

19.1%(5.2%, 33%)

9%(1.4%, 16.7%)

15.8%(4.1%, 27.4%)

Age >= 65 Female

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

18.7%(6.7%, 30.8%)

1.9%(-1.8%, 5.7%)

8%(-0.3%, 16.4%)

Age >= 65 Female

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Female

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Female

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Female

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

92.8%(89.6%, 96.1%)

95.3%(92.6%, 98%)

92.3%(89%, 95.7%)

Age >= 65 Female

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.5%(94.2%, 98.9%)

100%(100%, 100%)

99%(97.8%, 100.2%)

Age >= 65 Female

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

99.2%(98.3%, 100.1%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Female

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Female

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Female

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Female

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

10.9%(2.7%, 19.2%)

3.3%(-1.3%, 7.9%)

9.8%(1.2%, 18.4%)

Age >= 65 Female

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

3.7%(-2.9%, 10.3%)

0%(0%, 0%)

1.9%(-1.8%, 5.7%)

Age >= 65 Female

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

3.3%(-1.3%, 7.9%)

1.9%(-1.8%, 5.7%)

1.9%(-1.8%, 5.7%)

Age >= 65 Male

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Male

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Male

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Male

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

67.6%(60.9%, 74.3%)

76.4%(70.3%, 82.5%)

67.3%(60.6%, 74%)

Age >= 65 Male

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

84%(78.7%, 89.2%)

94.3%(88%, 100.5%)

92.6%(88.8%, 96.5%)

Age >= 65 Male

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

89.2%(84.8%, 93.7%)

98.5%(96.7%, 100.2%)

94.5%(91.1%, 97.9%)

Age >= 65 Male

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Male

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Male

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Male

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

15.3%(-1.5%, 32.2%)

11.4%(-3.4%, 26.2%)

17.2%(0.2%, 34.2%)

Age >= 65 Male

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

12.5%(-0.1%, 25.1%)

3.2%(-1.3%, 7.7%)

9.5%(0.4%, 18.6%)

Age >= 65 Male

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

4.3%(-5.9%, 14.4%)

3.2%(-1.3%, 7.7%)

6.4%(0.2%, 12.7%)

Age >= 65 Male

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Male

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Male

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Male

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

94.7%(91.6%, 97.9%)

97.5%(95.3%, 99.8%)

93.8%(90.4%, 97.2%)

Age >= 65 Male

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.3%(93.6%, 99.1%)

99.4%(98.2%, 100.6%)

98.8%(97.1%, 100.5%)

Age >= 65 Male

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

99.3%(98.4%, 100.2%)

100%(100%, 100%)

99.7%(99%, 100.3%)

Age >= 65 Male

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Male

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Male

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Male

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

5.7%(-3.5%, 14.9%)

5.8%(-1.9%, 13.5%)

7.6%(-2.2%, 17.4%)

Age >= 65 Male

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

1.3%(-4.7%, 7.2%)

1.3%(-1.3%, 4%)

3.2%(-1.3%, 7.7%)

Age >= 65 Male

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2.7%(-1%, 6.4%)

1.3%(-1.3%, 4%)

1.3%(-1.3%, 4%)

Table 8g. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by Hispanic or Latino ethnicity

Group

Visit

Baseline COVID

Marker

Comparison

Responder

% 2-Fold Rise

% 4-Fold Rise

Hispanic or Latino

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Hispanic or Latino

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

98%(94.1%, 101.9%)

100%(100%, 100%)

Hispanic or Latino

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Hispanic or Latino

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

40.6%(28.4%, 52.7%)

56.7%(43.5%, 69.9%)

40.6%(28.4%, 52.7%)

Hispanic or Latino

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

56.3%(43.1%, 69.5%)

80.9%(69.2%, 92.6%)

75.2%(63%, 87.5%)

Hispanic or Latino

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

76%(64.1%, 87.9%)

89.8%(80.8%, 98.8%)

83.3%(72.3%, 94.3%)

Hispanic or Latino

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Hispanic or Latino

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Hispanic or Latino

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Hispanic or Latino

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

41.6%(17.1%, 66.1%)

37%(13%, 61.1%)

41.6%(17.1%, 66.1%)

Hispanic or Latino

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

34.4%(10.2%, 58.7%)

4.7%(-10%, 19.3%)

26%(5.1%, 46.9%)

Hispanic or Latino

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

10.2%(-10.6%, 30.9%)

-0.2%(-4.3%, 3.8%)

-0.2%(-4.3%, 3.8%)

Hispanic or Latino

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Hispanic or Latino

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Hispanic or Latino

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Hispanic or Latino

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

86.5%(76.4%, 96.6%)

96.1%(90.6%, 101.6%)

86.5%(76.4%, 96.6%)

Hispanic or Latino

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

98.2%(96.3%, 100%)

100%(100%, 100%)

99.2%(98.2%, 100.3%)

Hispanic or Latino

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

92.8%(85.2%, 100.4%)

100%(100%, 100%)

100%(100%, 100%)

Hispanic or Latino

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Hispanic or Latino

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Hispanic or Latino

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Hispanic or Latino

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

13.1%(-4.8%, 31%)

10.7%(-2%, 23.3%)

14.4%(-3.6%, 32.5%)

Hispanic or Latino

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

10.9%(-5.7%, 27.5%)

0%(0%, 0%)

2.7%(-0.9%, 6.3%)

Hispanic or Latino

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

-2.7%(-12.9%, 7.4%)

0%(0%, 0%)

0%(0%, 0%)

Not Hispanic or Latino

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not Hispanic or Latino

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not Hispanic or Latino

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not Hispanic or Latino

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

52.2%(47.2%, 57.1%)

66.5%(61.8%, 71.3%)

51.3%(46.3%, 56.2%)

Not Hispanic or Latino

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

66.9%(62.2%, 71.7%)

87.2%(81.8%, 92.5%)

82.1%(78.3%, 86%)

Not Hispanic or Latino

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

80.1%(76%, 84.2%)

93.9%(89.2%, 98.6%)

88.6%(83.5%, 93.8%)

Not Hispanic or Latino

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not Hispanic or Latino

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not Hispanic or Latino

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not Hispanic or Latino

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

24.7%(11.9%, 37.4%)

23.4%(10.8%, 36%)

26.4%(13.8%, 39%)

Not Hispanic or Latino

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

24.1%(11.5%, 36.6%)

15.1%(6.4%, 23.9%)

26.8%(16.4%, 37.2%)

Not Hispanic or Latino

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

8.8%(-2%, 19.6%)

6.7%(1%, 12.4%)

9.9%(1.9%, 18%)

Not Hispanic or Latino

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not Hispanic or Latino

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not Hispanic or Latino

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not Hispanic or Latino

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

88.4%(85.2%, 91.7%)

94.4%(92.2%, 96.7%)

88.3%(85%, 91.6%)

Not Hispanic or Latino

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

95.3%(93.5%, 97.2%)

96.6%(92.2%, 101%)

97.5%(96.2%, 98.7%)

Not Hispanic or Latino

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

97.8%(96.4%, 99.2%)

99.7%(99.4%, 100%)

99.1%(98.2%, 99.9%)

Not Hispanic or Latino

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not Hispanic or Latino

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not Hispanic or Latino

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not Hispanic or Latino

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

20.2%(11.6%, 28.8%)

11.4%(4.7%, 18.1%)

21.5%(12.7%, 30.4%)

Not Hispanic or Latino

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

11.9%(4.4%, 19.5%)

2%(-1.3%, 5.3%)

9.8%(3.3%, 16.4%)

Not Hispanic or Latino

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2%(-1.2%, 5.1%)

0.3%(-0.2%, 0.7%)

2.3%(-0.8%, 5.3%)

Not reported and unknown

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

53%(35.8%, 70.2%)

64.4%(47.8%, 81.1%)

52.6%(35.4%, 69.8%)

Not reported and unknown

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

70.4%(55.5%, 85.3%)

88%(75.5%, 100.6%)

86.6%(73.9%, 99.3%)

Not reported and unknown

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

83.2%(70.1%, 96.3%)

98.6%(96.7%, 100.5%)

90.9%(80.7%, 101.1%)

Not reported and unknown

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

42.2%(6.3%, 78.1%)

14.4%(-24.1%, 53%)

42.2%(6.3%, 78.1%)

Not reported and unknown

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

13.7%(-26.4%, 53.9%)

17.5%(-4.4%, 39.5%)

-9.3%(-45.3%, 26.7%)

Not reported and unknown

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

-0.5%(-7.9%, 6.9%)

1.2%(-1.2%, 3.6%)

-0.4%(-4.3%, 3.5%)

Not reported and unknown

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

90.1%(79.6%, 100.5%)

91.2%(80.9%, 101.4%)

88.9%(78.4%, 99.5%)

Not reported and unknown

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

95%(86.6%, 103.5%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

44.1%(17.8%, 70.3%)

24.5%(4.6%, 44.3%)

45.7%(19.3%, 72.2%)

Not reported and unknown

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

19.3%(-14.5%, 53%)

13.2%(-6.7%, 33%)

14.2%(-18%, 46.5%)

Not reported and unknown

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

11%(-8.4%, 30.4%)

1.2%(-1.2%, 3.6%)

11%(-8.4%, 30.4%)

Table 8h. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by Race

Group

Visit

Baseline COVID

Marker

Comparison

Responder

% 2-Fold Rise

% 4-Fold Rise

Not reported and unknown

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

53.2%(38.2%, 68.1%)

62.2%(47.5%, 76.9%)

51.7%(36.8%, 66.7%)

Not reported and unknown

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

63.6%(49%, 78.2%)

86.3%(74.6%, 98%)

78.5%(65.9%, 91.1%)

Not reported and unknown

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

78.3%(65%, 91.5%)

94.9%(87.9%, 101.9%)

87.3%(76.3%, 98.3%)

Not reported and unknown

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

33.2%(-4.9%, 71.4%)

29.8%(-10%, 69.6%)

35.3%(-2.9%, 73.6%)

Not reported and unknown

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

42.1%(6.4%, 77.9%)

15.5%(-10.6%, 41.6%)

43.4%(11.4%, 75.3%)

Not reported and unknown

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

19.8%(-8.7%, 48.3%)

0.2%(-7.2%, 7.6%)

13%(-13.6%, 39.5%)

Not reported and unknown

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

94%(86.9%, 101.2%)

98.2%(95.9%, 100.6%)

93.5%(86.2%, 100.7%)

Not reported and unknown

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

97.1%(94.3%, 99.9%)

99.1%(97.4%, 100.8%)

97.7%(95.1%, 100.3%)

Not reported and unknown

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

99.1%(97.4%, 100.8%)

100%(100%, 100%)

100%(100%, 100%)

Not reported and unknown

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

21.8%(-5.3%, 48.8%)

0%(0%, 0%)

21.8%(-5.3%, 48.8%)

Not reported and unknown

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

-4.3%(-10.4%, 1.8%)

0%(0%, 0%)

0%(0%, 0%)

Not reported and unknown

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

American Indian or Alaska Native

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

American Indian or Alaska Native

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

American Indian or Alaska Native

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

American Indian or Alaska Native

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

28.5%(4.6%, 52.5%)

51%(22.3%, 79.7%)

28.5%(4.6%, 52.5%)

American Indian or Alaska Native

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

62.4%(32%, 92.8%)

88.6%(66.1%, 111%)

75.5%(46.9%, 104%)

American Indian or Alaska Native

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

75.5%(46.9%, 104%)

100%(100%, 100%)

77.1%(48.8%, 105.5%)

American Indian or Alaska Native

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

American Indian or Alaska Native

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

American Indian or Alaska Native

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

American Indian or Alaska Native

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

31.8%(-23%, 86.7%)

50.8%(13.3%, 88.3%)

31.8%(-23%, 86.7%)

American Indian or Alaska Native

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

58.4%(21.6%, 95.2%)

0%(0%, 0%)

0%(0%, 0%)

American Indian or Alaska Native

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

12.3%(-14.6%, 39.1%)

0%(0%, 0%)

0%(0%, 0%)

American Indian or Alaska Native

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

American Indian or Alaska Native

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

American Indian or Alaska Native

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

American Indian or Alaska Native

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

98.4%(95.2%, 101.6%)

100%(100%, 100%)

98.4%(95.2%, 101.6%)

American Indian or Alaska Native

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

98.4%(95.2%, 101.6%)

100%(100%, 100%)

100%(100%, 100%)

American Indian or Alaska Native

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

98.4%(95.2%, 101.6%)

100%(100%, 100%)

100%(100%, 100%)

American Indian or Alaska Native

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

American Indian or Alaska Native

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

American Indian or Alaska Native

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

American Indian or Alaska Native

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

9.3%(-9.9%, 28.5%)

0%(0%, 0%)

9.3%(-9.9%, 28.5%)

American Indian or Alaska Native

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

9.3%(-9.9%, 28.5%)

0%(0%, 0%)

9.3%(-9.9%, 28.5%)

American Indian or Alaska Native

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Asian

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Asian

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Asian

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Asian

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

51.7%(35.4%, 68.1%)

63.4%(47.4%, 79.5%)

51.7%(35.4%, 68.1%)

Asian

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

65.6%(49.9%, 81.3%)

95.6%(92.1%, 99%)

89.4%(81%, 97.8%)

Asian

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

89.4%(81%, 97.8%)

98.5%(96.4%, 100.6%)

97.1%(94.1%, 100%)

Asian

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Asian

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Asian

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Asian

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

5.8%(-29.5%, 41.1%)

-30.3%(-61.6%, 1%)

5.8%(-29.5%, 41.1%)

Asian

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

-21%(-55.3%, 13.3%)

-4.3%(-34.2%, 25.6%)

-0.6%(-36.1%, 35%)

Asian

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

-19%(-51.8%, 13.7%)

12.8%(-7.5%, 33.1%)

12.8%(-7.5%, 33.1%)

Asian

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Asian

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Asian

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Asian

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

92.3%(84.3%, 100.4%)

98.1%(95.6%, 100.6%)

92.3%(84.3%, 100.4%)

Asian

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

98.4%(96.6%, 100.2%)

100%(100%, 100%)

99.5%(98.4%, 100.5%)

Asian

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

98.5%(96.4%, 100.6%)

100%(100%, 100%)

100%(100%, 100%)

Asian

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Asian

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Asian

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Asian

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

10.4%(-23.7%, 44.4%)

18.9%(-12%, 49.9%)

8.6%(-25.7%, 42.8%)

Asian

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

14.2%(-16.1%, 44.5%)

0%(0%, 0%)

0%(0%, 0%)

Asian

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

-8.6%(-25.3%, 8.2%)

0%(0%, 0%)

0%(0%, 0%)

Black or African American

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Black or African American

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

98.6%(95.8%, 101.3%)

100%(100%, 100%)

Black or African American

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Black or African American

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

45.5%(35.7%, 55.2%)

60.3%(50.4%, 70.2%)

45.3%(35.5%, 55%)

Black or African American

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

63.6%(53.9%, 73.4%)

80.9%(72.3%, 89.5%)

77.6%(68.9%, 86.4%)

Black or African American

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

76.5%(67.7%, 85.3%)

95.6%(91.5%, 99.8%)

87%(79.8%, 94.1%)

Black or African American

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Black or African American

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Black or African American

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Black or African American

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

26%(2%, 50%)

20%(-1.5%, 41.5%)

24.1%(0.3%, 47.9%)

Black or African American

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

26.4%(2.7%, 50.1%)

17.7%(1.7%, 33.6%)

33.4%(15.8%, 51%)

Black or African American

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

20.1%(3.7%, 36.5%)

2.5%(-7.4%, 12.4%)

2.8%(-7.9%, 13.4%)

Black or African American

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Black or African American

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Black or African American

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Black or African American

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

84.4%(76.9%, 92%)

90.4%(83.9%, 97%)

84.2%(76.6%, 91.8%)

Black or African American

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

89.4%(82.7%, 96.1%)

96.4%(92.4%, 100.5%)

92.8%(87.2%, 98.4%)

Black or African American

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

96.2%(92.1%, 100.2%)

99.6%(98.9%, 100.3%)

96.6%(92.6%, 100.6%)

Black or African American

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Black or African American

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Black or African American

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Black or African American

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

22.9%(7%, 38.9%)

15.4%(2.2%, 28.7%)

22.9%(7%, 38.9%)

Black or African American

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

8.5%(-3.4%, 20.4%)

3.2%(-5.9%, 12.2%)

4.4%(-5%, 13.7%)

Black or African American

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

3.1%(-0.4%, 6.7%)

1%(-0.9%, 2.9%)

2.2%(-0.8%, 5.2%)

Multiracial

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Multiracial

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Multiracial

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Multiracial

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

45.8%(26%, 65.5%)

62.6%(43%, 82.1%)

45.8%(26%, 65.5%)

Multiracial

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

46.9%(28.1%, 65.7%)

79.7%(62.6%, 96.8%)

79%(61.8%, 96.1%)

Multiracial

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

76.8%(59.5%, 94.1%)

91.9%(80.7%, 103.1%)

85.1%(70.3%, 100%)

Multiracial

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Multiracial

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Multiracial

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Multiracial

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

52.5%(19.9%, 85.1%)

47.4%(4.8%, 90.1%)

52.5%(19.9%, 85.1%)

Multiracial

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

23.2%(-23.3%, 69.7%)

1.2%(-10.7%, 13%)

18.1%(-17.8%, 54.1%)

Multiracial

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

17.8%(-16.9%, 52.5%)

0%(0%, 0%)

0%(0%, 0%)

Multiracial

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Multiracial

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Multiracial

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Multiracial

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

87.1%(72.4%, 101.7%)

93.8%(83.1%, 104.5%)

87.1%(72.4%, 101.7%)

Multiracial

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Multiracial

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Multiracial

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Multiracial

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Multiracial

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Multiracial

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

21.5%(-12.5%, 55.4%)

21.5%(-12.5%, 55.4%)

21.5%(-12.5%, 55.4%)

Multiracial

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

33.3%(-4.4%, 70.9%)

0%(0%, 0%)

16.6%(-16%, 49.3%)

Multiracial

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Native Hawaiian or Other Pacific Islander

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Native Hawaiian or Other Pacific Islander

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Native Hawaiian or Other Pacific Islander

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Native Hawaiian or Other Pacific Islander

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

63.5%(29.2%, 97.9%)

93.1%(84.9%, 101.4%)

63.5%(29.2%, 97.9%)

Native Hawaiian or Other Pacific Islander

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

68.9%(35.1%, 102.8%)

86.2%(59.1%, 113.3%)

68.9%(35.1%, 102.8%)

Native Hawaiian or Other Pacific Islander

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

93.1%(84.9%, 101.4%)

96.6%(89.8%, 103.3%)

96.6%(89.8%, 103.3%)

Native Hawaiian or Other Pacific Islander

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Native Hawaiian or Other Pacific Islander

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Native Hawaiian or Other Pacific Islander

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Native Hawaiian or Other Pacific Islander

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

29.9%(-18.1%, 78%)

29.9%(-18.1%, 78%)

29.9%(-18.1%, 78%)

Native Hawaiian or Other Pacific Islander

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

13.5%(-17.2%, 44.1%)

0%(0%, 0%)

0%(0%, 0%)

Native Hawaiian or Other Pacific Islander

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Native Hawaiian or Other Pacific Islander

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Native Hawaiian or Other Pacific Islander

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Native Hawaiian or Other Pacific Islander

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Native Hawaiian or Other Pacific Islander

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

98%(94.2%, 101.9%)

98%(94.2%, 101.9%)

98%(94.2%, 101.9%)

Native Hawaiian or Other Pacific Islander

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Native Hawaiian or Other Pacific Islander

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Native Hawaiian or Other Pacific Islander

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Native Hawaiian or Other Pacific Islander

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Native Hawaiian or Other Pacific Islander

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Native Hawaiian or Other Pacific Islander

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

16.4%(-16.1%, 48.9%)

0%(0%, 0%)

16.4%(-16.1%, 48.9%)

Native Hawaiian or Other Pacific Islander

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

16.4%(-16.1%, 48.9%)

0%(0%, 0%)

0%(0%, 0%)

Native Hawaiian or Other Pacific Islander

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Other

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Other

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Other

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Other

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

45.2%(18.1%, 72.3%)

59.7%(29.2%, 90.3%)

45.2%(18.1%, 72.3%)

Other

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

74.2%(47.4%, 101%)

96.8%(90.7%, 103%)

80.5%(54.4%, 106.6%)

Other

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

66.5%(36.5%, 96.5%)

81%(54.9%, 107.1%)

81%(54.9%, 107.1%)

Other

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Other

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Other

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Other

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

78.5%(49%, 108%)

75%(45.8%, 104.3%)

78.5%(49%, 108%)

Other

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

59.6%(17.6%, 101.6%)

14.7%(-14.1%, 43.4%)

33.6%(-2.6%, 69.7%)

Other

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

4.4%(-36.9%, 45.7%)

0%(0%, 0%)

-14.5%(-42.9%, 13.9%)

Other

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Other

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Other

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Other

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

85.5%(60.4%, 110.6%)

98.2%(94.6%, 101.7%)

85.5%(60.4%, 110.6%)

Other

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.8%(90.7%, 103%)

96.8%(90.7%, 103%)

96.8%(90.7%, 103%)

Other

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

84.1%(58.5%, 109.8%)

100%(100%, 100%)

100%(100%, 100%)

Other

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Other

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Other

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Other

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

19.1%(-26.9%, 65.1%)

33.6%(-2.6%, 69.7%)

23.3%(-22.7%, 69.3%)

Other

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

-10.3%(-39.9%, 19.4%)

0%(0%, 0%)

4.3%(-4.1%, 12.6%)

Other

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

46.6%(28.6%, 64.6%)

61.7%(43%, 80.3%)

46.6%(28.6%, 64.6%)

White

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

68.7%(51.5%, 85.9%)

78.3%(61.9%, 94.6%)

75.5%(58.9%, 92%)

White

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

80.6%(64.1%, 97%)

95.4%(88.1%, 102.8%)

88.9%(75.5%, 102.2%)

White

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

37.2%(2.9%, 71.5%)

20.2%(-15.4%, 55.8%)

37.2%(2.9%, 71.5%)

White

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

16.3%(-20%, 52.6%)

13%(-7.4%, 33.4%)

5.5%(-27.5%, 38.6%)

White

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

-1.7%(-14.1%, 10.8%)

1.5%(-1.5%, 4.5%)

0.1%(-4%, 4.2%)

White

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

87.3%(73.7%, 100.9%)

91.5%(79.9%, 103%)

85.9%(72%, 99.7%)

White

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

92%(80.7%, 103.4%)

100%(100%, 100%)

99.5%(98.5%, 100.5%)

White

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

94.6%(87.1%, 102%)

100%(100%, 100%)

100%(100%, 100%)

White

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

34.4%(9.6%, 59.3%)

12.5%(-7.9%, 32.9%)

36.2%(11.1%, 61.3%)

White

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

24.6%(-8.2%, 57.5%)

12.5%(-7.9%, 32.9%)

15.1%(-15.9%, 46.1%)

White

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

11.5%(-8.7%, 31.7%)

0%(0%, 0%)

10.2%(-9.8%, 30.3%)

White Non-Hispanic

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

54.2%(47.6%, 60.8%)

68.5%(62.4%, 74.7%)

53%(46.4%, 59.6%)

White Non-Hispanic

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

68.7%(62.6%, 74.9%)

88.3%(80.1%, 96.5%)

84.6%(79.8%, 89.4%)

White Non-Hispanic

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

80.7%(75.4%, 86%)

92.6%(84.8%, 100.3%)

88.3%(80.3%, 96.4%)

White Non-Hispanic

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

23.2%(5.9%, 40.5%)

25%(8.1%, 41.9%)

25.9%(8.9%, 42.9%)

White Non-Hispanic

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

23.7%(6.8%, 40.5%)

17%(5.3%, 28.7%)

23.7%(9.8%, 37.5%)

White Non-Hispanic

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

7.3%(-7.5%, 22.1%)

7.5%(-0.4%, 15.4%)

11.1%(0.3%, 21.9%)

White Non-Hispanic

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

87.7%(83.3%, 92.2%)

94.2%(91.2%, 97.1%)

87.6%(83.2%, 92.1%)

White Non-Hispanic

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.5%(94.4%, 98.5%)

95.6%(88.3%, 103%)

98.6%(97.7%, 99.5%)

White Non-Hispanic

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

98.1%(96.2%, 99.9%)

99.7%(99.2%, 100.1%)

99.5%(98.9%, 100.1%)

White Non-Hispanic

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

21.8%(10.8%, 32.8%)

12.4%(3.5%, 21.3%)

24.1%(12.6%, 35.5%)

White Non-Hispanic

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

15.1%(4.9%, 25.2%)

2.3%(-2.2%, 6.8%)

12.8%(3.4%, 22.1%)

White Non-Hispanic

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2.6%(-2.1%, 7.4%)

0.4%(-0.4%, 1.1%)

3.2%(-1.5%, 7.8%)

Table 8i. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by Race and ethnic group

Group

Visit

Baseline COVID

Marker

Comparison

Responder

% 2-Fold Rise

% 4-Fold Rise

White Non-Hispanic

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

54.2%(47.6%, 60.8%)

68.5%(62.4%, 74.7%)

53%(46.4%, 59.6%)

White Non-Hispanic

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

68.7%(62.6%, 74.9%)

88.3%(80.1%, 96.5%)

84.6%(79.8%, 89.4%)

White Non-Hispanic

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

80.7%(75.4%, 86%)

92.6%(84.8%, 100.3%)

88.3%(80.3%, 96.4%)

White Non-Hispanic

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

23.2%(5.9%, 40.5%)

25%(8.1%, 41.9%)

25.9%(8.9%, 42.9%)

White Non-Hispanic

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

23.7%(6.8%, 40.5%)

17%(5.3%, 28.7%)

23.7%(9.8%, 37.5%)

White Non-Hispanic

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

7.3%(-7.5%, 22.1%)

7.5%(-0.4%, 15.4%)

11.1%(0.3%, 21.9%)

White Non-Hispanic

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

White Non-Hispanic

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

87.7%(83.3%, 92.2%)

94.2%(91.2%, 97.1%)

87.6%(83.2%, 92.1%)

White Non-Hispanic

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.5%(94.4%, 98.5%)

95.6%(88.3%, 103%)

98.6%(97.7%, 99.5%)

White Non-Hispanic

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

98.1%(96.2%, 99.9%)

99.7%(99.2%, 100.1%)

99.5%(98.9%, 100.1%)

White Non-Hispanic

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

White Non-Hispanic

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

21.8%(10.8%, 32.8%)

12.4%(3.5%, 21.3%)

24.1%(12.6%, 35.5%)

White Non-Hispanic

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

15.1%(4.9%, 25.2%)

2.3%(-2.2%, 6.8%)

12.8%(3.4%, 22.1%)

White Non-Hispanic

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2.6%(-2.1%, 7.4%)

0.4%(-0.4%, 1.1%)

3.2%(-1.5%, 7.8%)

Communities of Color

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Communities of Color

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

99.4%(98.1%, 100.6%)

100%(100%, 100%)

Communities of Color

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Communities of Color

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

45.8%(39.2%, 52.5%)

61.7%(55%, 68.4%)

45.7%(39.1%, 52.4%)

Communities of Color

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

62%(55.3%, 68.7%)

84.2%(78.8%, 89.5%)

78.7%(72.8%, 84.5%)

Communities of Color

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

79.1%(73.4%, 84.8%)

94.7%(91.6%, 97.9%)

88.1%(83.4%, 92.8%)

Communities of Color

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Communities of Color

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Communities of Color

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Communities of Color

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

31.5%(16.5%, 46.5%)

20.7%(5.7%, 35.6%)

30.9%(15.9%, 45.9%)

Communities of Color

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

24.5%(9.6%, 39.4%)

8.9%(-0.8%, 18.6%)

24%(11.5%, 36.4%)

Communities of Color

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

7.9%(-4.5%, 20.3%)

4.1%(-1.1%, 9.3%)

2.6%(-4%, 9.1%)

Communities of Color

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Communities of Color

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Communities of Color

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Communities of Color

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

87.7%(83%, 92.4%)

94%(90.5%, 97.5%)

87.6%(82.9%, 92.3%)

Communities of Color

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

94.1%(90.8%, 97.5%)

98.1%(96.1%, 100.1%)

96.2%(93.5%, 99%)

Communities of Color

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

95.9%(93.1%, 98.7%)

99.8%(99.5%, 100.2%)

98.4%(96.4%, 100.3%)

Communities of Color

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Communities of Color

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Communities of Color

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Communities of Color

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

18.1%(6.5%, 29.6%)

15.3%(5.8%, 24.7%)

18.2%(6.6%, 29.8%)

Communities of Color

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

11.8%(2%, 21.7%)

1.5%(-2.1%, 5.1%)

4.7%(-0.4%, 9.8%)

Communities of Color

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

-0.1%(-4.1%, 3.8%)

0.4%(-0.4%, 1.2%)

0.9%(-0.4%, 2.1%)

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

52.8%(40.3%, 65.2%)

63.2%(51%, 75.4%)

51.8%(39.3%, 64.2%)

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

67%(55.1%, 78.9%)

85.6%(75.8%, 95.5%)

79.2%(68.7%, 89.7%)

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

79.5%(68.6%, 90.3%)

96.1%(91.1%, 101%)

88.1%(79.2%, 96.9%)

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

38.2%(10.8%, 65.5%)

28.4%(-1.2%, 58%)

39.4%(12%, 66.8%)

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

25.6%(-3.9%, 55.1%)

15.8%(-3.1%, 34.7%)

18.4%(-9.6%, 46.4%)

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

7.4%(-7.9%, 22.7%)

0.2%(-3.8%, 4.2%)

6.5%(-8.3%, 21.4%)

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

92.5%(85.8%, 99.3%)

95.5%(90.4%, 100.5%)

91.5%(84.6%, 98.4%)

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

95.3%(90.3%, 100.3%)

99.4%(98.2%, 100.6%)

98.4%(96.6%, 100.2%)

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

99.4%(98.2%, 100.6%)

100%(100%, 100%)

100%(100%, 100%)

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

31.2%(8.4%, 54%)

8.6%(-5.5%, 22.7%)

32.4%(9.4%, 55.3%)

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

8.6%(-13.8%, 30.9%)

8.6%(-5.5%, 22.7%)

10.8%(-11.3%, 32.9%)

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

7%(-6.7%, 20.8%)

0%(0%, 0%)

7%(-6.7%, 20.8%)

Table 8j. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by Age, Race and ethnic group

Group

Visit

Baseline COVID

Marker

Comparison

Responder

% 2-Fold Rise

% 4-Fold Rise

Age < 65 Communities of Color

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Communities of Color

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Communities of Color

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Communities of Color

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

39.6%(31.3%, 47.8%)

55.9%(47.5%, 64.3%)

39.6%(31.3%, 47.8%)

Age < 65 Communities of Color

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

56.5%(48.1%, 64.9%)

81.7%(75.2%, 88.3%)

74.8%(67.4%, 82.1%)

Age < 65 Communities of Color

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

75.4%(68.3%, 82.6%)

93.7%(89.8%, 97.6%)

85.7%(79.7%, 91.6%)

Age < 65 Communities of Color

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Communities of Color

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Communities of Color

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Communities of Color

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

31.7%(13.4%, 50%)

21.1%(2.7%, 39.6%)

31%(12.7%, 49.3%)

Age < 65 Communities of Color

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

26.1%(7.7%, 44.5%)

10.6%(-1.6%, 22.8%)

26.9%(11.4%, 42.4%)

Age < 65 Communities of Color

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

8.1%(-7.4%, 23.7%)

4.8%(-1.8%, 11.3%)

2.4%(-5.7%, 10.5%)

Age < 65 Communities of Color

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Communities of Color

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Communities of Color

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 Communities of Color

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

86.1%(80.2%, 92%)

93.3%(88.8%, 97.7%)

86.1%(80.2%, 92%)

Age < 65 Communities of Color

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

93.3%(89.1%, 97.5%)

97.6%(95.1%, 100.1%)

95.4%(92%, 98.9%)

Age < 65 Communities of Color

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

95.4%(92%, 98.9%)

99.8%(99.4%, 100.2%)

98%(95.6%, 100.5%)

Age < 65 Communities of Color

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Communities of Color

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Communities of Color

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 Communities of Color

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

21.3%(6.8%, 35.8%)

17.6%(5.7%, 29.4%)

21.9%(7.4%, 36.4%)

Age < 65 Communities of Color

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

14.3%(1.9%, 26.7%)

1.4%(-3%, 5.9%)

5.5%(-0.9%, 11.9%)

Age < 65 Communities of Color

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

-1.6%(-6.3%, 3%)

0%(0%, 0%)

0.6%(-0.6%, 1.9%)

Age < 65 NA

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 NA

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 NA

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 NA

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

49.3%(33.7%, 64.9%)

62.2%(46.9%, 77.4%)

48.5%(32.9%, 64.1%)

Age < 65 NA

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

63.6%(48.6%, 78.6%)

84.9%(73.5%, 96.3%)

77.3%(64.1%, 90.6%)

Age < 65 NA

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

75.1%(61.3%, 88.9%)

95.4%(89.2%, 101.7%)

85.7%(74.4%, 96.9%)

Age < 65 NA

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 NA

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 NA

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 NA

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

41.9%(8.4%, 75.4%)

31.9%(-4.4%, 68.2%)

41.9%(8.4%, 75.4%)

Age < 65 NA

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

30.2%(-6.2%, 66.6%)

19.5%(-3.9%, 42.9%)

21.9%(-12.8%, 56.6%)

Age < 65 NA

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

11%(-7.4%, 29.4%)

0.2%(-4.8%, 5.2%)

9.1%(-9.1%, 27.3%)

Age < 65 NA

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 NA

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 NA

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 NA

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

90.9%(82.2%, 99.5%)

94.7%(88.2%, 101.1%)

90.1%(81.3%, 98.8%)

Age < 65 NA

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

95.4%(89.2%, 101.7%)

99.2%(97.7%, 100.8%)

98.4%(96.3%, 100.6%)

Age < 65 NA

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

99.2%(97.7%, 100.8%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 NA

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 NA

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 NA

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 NA

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

38.5%(10.3%, 66.6%)

10.6%(-6.8%, 28%)

38.5%(10.3%, 66.6%)

Age < 65 NA

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

10%(-17.5%, 37.5%)

10.6%(-6.8%, 28%)

11.7%(-15.6%, 39%)

Age < 65 NA

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

8.7%(-8.3%, 25.7%)

0%(0%, 0%)

8.7%(-8.3%, 25.7%)

Age < 65 White Non-Hispanic

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 White Non-Hispanic

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 White Non-Hispanic

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 White Non-Hispanic

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

50.9%(42.7%, 59.1%)

66.3%(58.7%, 74%)

49.5%(41.3%, 57.7%)

Age < 65 White Non-Hispanic

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

64.2%(56.5%, 71.9%)

85.7%(75.3%, 96.2%)

82.1%(76.1%, 88.1%)

Age < 65 White Non-Hispanic

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

78.2%(71.6%, 84.9%)

91.1%(81.2%, 100.9%)

86.5%(76.2%, 96.8%)

Age < 65 White Non-Hispanic

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 White Non-Hispanic

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 White Non-Hispanic

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 White Non-Hispanic

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

22.3%(1.1%, 43.4%)

25.8%(5%, 46.5%)

25.1%(4.3%, 45.9%)

Age < 65 White Non-Hispanic

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

25.7%(4.9%, 46.4%)

18.7%(4.2%, 33.2%)

26%(9%, 43%)

Age < 65 White Non-Hispanic

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

4%(-14.2%, 22.2%)

8.4%(-1.4%, 18.1%)

10.4%(-2.9%, 23.7%)

Age < 65 White Non-Hispanic

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 White Non-Hispanic

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 White Non-Hispanic

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age < 65 White Non-Hispanic

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

86.5%(80.9%, 92%)

93.8%(90.1%, 97.5%)

86.5%(80.9%, 92%)

Age < 65 White Non-Hispanic

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.5%(93.9%, 99%)

94.6%(85.1%, 104%)

98.5%(97.5%, 99.6%)

Age < 65 White Non-Hispanic

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

97.5%(95.1%, 99.9%)

99.6%(99%, 100.2%)

99.4%(98.7%, 100.1%)

Age < 65 White Non-Hispanic

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 White Non-Hispanic

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 White Non-Hispanic

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age < 65 White Non-Hispanic

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

24.2%(10.8%, 37.6%)

14.4%(3.5%, 25.3%)

27%(13.1%, 41%)

Age < 65 White Non-Hispanic

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

18.2%(5.7%, 30.8%)

2.8%(-2.7%, 8.4%)

15.4%(3.8%, 27%)

Age < 65 White Non-Hispanic

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2.8%(-3%, 8.6%)

0%(0%, 0%)

3.5%(-2.2%, 9.2%)

Age >= 65 Communities of Color

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Communities of Color

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

97.1%(91.5%, 102.7%)

100%(100%, 100%)

Age >= 65 Communities of Color

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Communities of Color

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

69.1%(63%, 75.3%)

83.4%(78.4%, 88.4%)

68.7%(62.5%, 74.8%)

Age >= 65 Communities of Color

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

82.5%(77.4%, 87.6%)

93.5%(87.3%, 99.6%)

93.1%(89.7%, 96.5%)

Age >= 65 Communities of Color

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

92.6%(89.1%, 96.1%)

98.6%(97.1%, 100.2%)

97.2%(95%, 99.4%)

Age >= 65 Communities of Color

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Communities of Color

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Communities of Color

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Communities of Color

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

33.9%(17.2%, 50.6%)

21.5%(6.9%, 36%)

33.9%(17.2%, 50.6%)

Age >= 65 Communities of Color

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

21.7%(7.8%, 35.5%)

3.7%(-1.4%, 8.8%)

14.8%(5.3%, 24.4%)

Age >= 65 Communities of Color

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

9.3%(1.5%, 17.1%)

1.9%(-1.8%, 5.5%)

3.7%(-1.4%, 8.8%)

Age >= 65 Communities of Color

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Communities of Color

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Communities of Color

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 Communities of Color

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

93.5%(90.3%, 96.8%)

96.8%(94.4%, 99.1%)

93.1%(89.7%, 96.5%)

Age >= 65 Communities of Color

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

97.2%(95%, 99.4%)

100%(100%, 100%)

99.1%(97.8%, 100.4%)

Age >= 65 Communities of Color

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

97.7%(95.7%, 99.7%)

100%(100%, 100%)

99.5%(98.6%, 100.4%)

Age >= 65 Communities of Color

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Communities of Color

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Communities of Color

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 Communities of Color

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

7.4%(0.4%, 14.5%)

7.4%(0.4%, 14.5%)

5.4%(-2.7%, 13.5%)

Age >= 65 Communities of Color

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

3.7%(-1.4%, 8.8%)

1.9%(-1.8%, 5.5%)

1.9%(-1.8%, 5.5%)

Age >= 65 Communities of Color

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

5.6%(-0.6%, 11.7%)

1.9%(-1.8%, 5.5%)

1.9%(-1.8%, 5.5%)

Age >= 65 NA

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 NA

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 NA

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 NA

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

64.9%(52.4%, 77.4%)

66.7%(54.3%, 79%)

63.2%(50.5%, 75.8%)

Age >= 65 NA

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

78.9%(68.3%, 89.6%)

89.2%(71%, 107.3%)

86%(76.9%, 95.1%)

Age >= 65 NA

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

94.7%(88.9%, 100.6%)

98.2%(94.8%, 101.7%)

96.5%(91.7%, 101.3%)

Age >= 65 NA

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 NA

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 NA

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 NA

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

20.1%(-9.1%, 49.3%)

12%(-14.1%, 38%)

26.4%(-3.3%, 56%)

Age >= 65 NA

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

3.8%(-16.7%, 24.3%)

0%(0%, 0%)

1.9%(-13%, 16.8%)

Age >= 65 NA

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

-6.8%(-25.5%, 11.9%)

0%(0%, 0%)

-4.3%(-12.9%, 4.2%)

Age >= 65 NA

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 NA

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 NA

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 NA

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

98.2%(94.8%, 101.7%)

98.2%(94.8%, 101.7%)

96.5%(91.7%, 101.3%)

Age >= 65 NA

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

94.7%(88.9%, 100.6%)

100%(100%, 100%)

98.2%(94.8%, 101.7%)

Age >= 65 NA

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 NA

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 NA

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 NA

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 NA

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

6.2%(-6%, 18.5%)

Age >= 65 NA

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

1.9%(-13%, 16.8%)

0%(0%, 0%)

6.2%(-6%, 18.5%)

Age >= 65 NA

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 White Non-Hispanic

Day 29

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 White Non-Hispanic

Day 29

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 White Non-Hispanic

Day 29

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 White Non-Hispanic

Day 29

Negative

Live virus-nAb MN50

Vaccine vs Placebo

66.2%(59.6%, 72.8%)

76.8%(70.9%, 82.7%)

66.2%(59.6%, 72.8%)

Age >= 65 White Non-Hispanic

Day 29

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

85.4%(80.4%, 90.3%)

97.5%(95.3%, 99.7%)

93.9%(90.6%, 97.3%)

Age >= 65 White Non-Hispanic

Day 29

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

89.9%(85.7%, 94.1%)

98%(96%, 99.9%)

94.9%(91.9%, 98%)

Age >= 65 White Non-Hispanic

Day 29

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 White Non-Hispanic

Day 29

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 White Non-Hispanic

Day 29

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 White Non-Hispanic

Day 29

Positive

Live virus-nAb MN50

Vaccine vs Placebo

26.2%(8%, 44.3%)

21.2%(4.6%, 37.7%)

28.1%(10%, 46.2%)

Age >= 65 White Non-Hispanic

Day 29

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

15%(-0.2%, 30.1%)

9.8%(1.6%, 18%)

14.3%(1.7%, 26.8%)

Age >= 65 White Non-Hispanic

Day 29

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

20.1%(6.7%, 33.6%)

3.9%(-1.5%, 9.3%)

13.7%(4.2%, 23.3%)

Age >= 65 White Non-Hispanic

Day 57

Negative

Anti N IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 White Non-Hispanic

Day 57

Negative

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 White Non-Hispanic

Day 57

Negative

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 White Non-Hispanic

Day 57

Negative

Live virus-nAb MN50

Vaccine vs Placebo

92.4%(88.7%, 96.1%)

95.5%(92.5%, 98.4%)

91.9%(88.1%, 95.7%)

Age >= 65 White Non-Hispanic

Day 57

Negative

Pseudovirus-nAb ID50

Vaccine vs Placebo

96.5%(93.9%, 99%)

99.5%(98.5%, 100.5%)

99%(97.6%, 100.4%)

Age >= 65 White Non-Hispanic

Day 57

Negative

Pseudovirus-nAb ID80

Vaccine vs Placebo

100%(100%, 100%)

100%(100%, 100%)

100%(100%, 100%)

Age >= 65 White Non-Hispanic

Day 57

Positive

Anti N IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 White Non-Hispanic

Day 57

Positive

Anti RBD IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 White Non-Hispanic

Day 57

Positive

Anti Spike IgG (IU/ml)

Vaccine vs Placebo

0%(0%, 0%)

0%(0%, 0%)

0%(0%, 0%)

Age >= 65 White Non-Hispanic

Day 57

Positive

Live virus-nAb MN50

Vaccine vs Placebo

12.1%(0.9%, 23.3%)

4.1%(-3.3%, 11.5%)

12.1%(0.9%, 23.3%)

Age >= 65 White Non-Hispanic

Day 57

Positive

Pseudovirus-nAb ID50

Vaccine vs Placebo

2.1%(-4.3%, 8.6%)

0%(0%, 0%)

2%(-1.9%, 5.8%)

Age >= 65 White Non-Hispanic

Day 57

Positive

Pseudovirus-nAb ID80

Vaccine vs Placebo

2%(-1.9%, 5.8%)

2%(-1.9%, 5.8%)

2%(-1.9%, 5.8%)

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

Baseline SARS-CoV-2 Negative

Vaccine

Placebo

Comparison

Visit

Marker

N

Resp rate

GMT/GMC

N

Resp rate

GMT/GMC

Resp Rate Difference

GMTR/GMCR

Day 29

Anti N IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

24220(20801, 28202)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

100%(100%, 100%)

2422.01(2080.08, 2820.15)

Day 29

Anti RBD IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

24778(21610, 28411)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

100%(100%, 100%)

2471.84(2155.62, 2834.45)

Day 29

Anti Spike IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

46301(41313, 51891)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

100%(100%, 100%)

4630.07(4131.28, 5189.07)

Day 29

Live virus-nAb MN50

904

6365.6/12410.2 = 51.3%(46.8%, 55.8%)

150(132, 170)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

31(31, 31)

51.3%(46.8%, 55.8%)

4.82(4.24, 5.48)

Day 29

Pseudovirus-nAb ID50

904

8231.8/12410.2 = 66.3%(61.9%, 70.5%)

106(91, 123)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

5(5, 5)

66.3%(62%, 70.6%)

20.83(17.88, 24.28)

Day 29

Pseudovirus-nAb ID80

904

9929.4/12410.2 = 80.0%(76.0%, 83.5%)

217(186, 253)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

5(5, 5)

80%(76.3%, 83.7%)

42.34(36.01, 49.78)

Day 57

Anti N IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

402190(335224, 482533)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

100%(100%, 100%)

40219.00(33522.42, 48253.31)

Day 57

Anti RBD IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

1074131(934344, 1234832)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

100%(100%, 100%)

107413.11(93434.37, 123483.22)

Day 57

Anti Spike IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

2349481(2085980, 2646267)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

100%(100%, 100%)

234948.11(208598.05, 264626.72)

Day 57

Live virus-nAb MN50

904

10972.1/12410.2 = 88.4%(85.1%, 91.1%)

1465(1241, 1728)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

31(31, 31)

88.4%(85.4%, 91.4%)

47.12(39.94, 55.60)

Day 57

Pseudovirus-nAb ID50

904

11856/12410.2 = 95.5%(93.5%, 97.0%)

1784(1481, 2148)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

5(5, 5)

95.5%(93.8%, 97.2%)

351.07(290.72, 423.93)

Day 57

Pseudovirus-nAb ID80

904

12107.7/12410.2 = 97.6%(95.8%, 98.6%)

2900(2421, 3473)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

5(5, 5)

97.6%(96.2%, 98.9%)

579.95(484.26, 694.55)

Table 10. Antibody levels in the baseline SARS-CoV-2 positive per-protocol cohort (vaccine vs. placebo)

Baseline SARS-CoV-2 Positive

Vaccine

Placebo

Comparison

Visit

Marker

N

Resp rate

GMT/GMC

N

Resp rate

GMT/GMC

Resp Rate Difference

GMTR/GMCR

Day 29

Anti N IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

38929(28974, 52304)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

12225(9438, 15835)

0%(0%, 0%)

3.18(2.15, 4.72)

Day 29

Anti RBD IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

40407(31177, 52370)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

11927(9430, 15085)

0%(0%, 0%)

3.39(2.39, 4.81)

Day 29

Anti Spike IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

80434(65269, 99124)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

18081(15037, 21741)

0%(0%, 0%)

4.45(3.37, 5.88)

Day 29

Live virus-nAb MN50

273

871.3/1416.8 = 61.5%(53.3%, 69.1%)

210(164, 269)

270

437.8/1337.3 = 32.7%(25.9%, 40.4%)

88(71, 108)

28.8%(18%, 39.6%)

2.39(1.73, 3.30)

Day 29

Pseudovirus-nAb ID50

273

1076.4/1416.8 = 76.0%(68.1%, 82.4%)

173(132, 227)

270

691.9/1337.3 = 51.7%(43.7%, 59.7%)

51(40, 65)

24.2%(13.5%, 35%)

3.40(2.36, 4.91)

Day 29

Pseudovirus-nAb ID80

273

1220.6/1416.8 = 86.2%(79.4%, 90.9%)

337(255, 445)

270

1047.7/1337.3 = 78.3%(70.9%, 84.3%)

150(114, 198)

7.8%(-1%, 16.6%)

2.24(1.52, 3.32)

Day 57

Anti N IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

860317(615674, 1202171)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

150527(109098, 207686)

0%(0%, 0%)

5.72(3.59, 9.09)

Day 57

Anti RBD IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

2681811(2105403, 3416023)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

462227(354280, 603065)

0%(0%, 0%)

5.80(4.05, 8.31)

Day 57

Anti Spike IgG (IU/ml)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

5800314(4839344, 6952107)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

723728(582826, 898695)

0%(0%, 0%)

8.01(6.04, 10.63)

Day 57

Live virus-nAb MN50

273

1378.5/1416.8 = 97.3%(93.9%, 98.8%)

3827(3024, 4843)

270

1006.4/1337.3 = 75.3%(67.2%, 81.9%)

595(443, 799)

22.1%(14.4%, 29.7%)

6.43(4.41, 9.38)

Day 57

Pseudovirus-nAb ID50

273

1368.2/1416.8 = 96.6%(92.0%, 98.6%)

4749(3360, 6714)

270

1121.5/1337.3 = 83.9%(76.3%, 89.3%)

521(364, 746)

12.7%(5.6%, 19.8%)

9.12(5.54, 15.00)

Day 57

Pseudovirus-nAb ID80

273

1404.2/1416.8 = 99.1%(96.0%, 99.8%)

7806(5412, 11259)

270

1293.4/1337.3 = 96.7%(91.4%, 98.8%)

1714(1251, 2350)

2.4%(-1.1%, 5.9%)

4.55(2.81, 7.38)

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

Vaccine Recipients

Baseline SARS-CoV-2 Negative

Baseline SARS-CoV-2 Positive

Comparison

Visit

Marker

N

Resp rate

GMT/GMC

N

Resp rate

GMT/GMC

Resp Rate Difference

GMTR/GMCR

Day 29

Anti N IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

24220(20801, 28202)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

38929(28974, 52304)

0%(0%, 0%)

0.62(0.45, 0.87)

Day 29

Anti RBD IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

24778(21610, 28411)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

40407(31177, 52370)

0%(0%, 0%)

0.61(0.46, 0.82)

Day 29

Anti Spike IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

46301(41313, 51891)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

80434(65269, 99124)

0%(0%, 0%)

0.58(0.45, 0.73)

Day 29

Live virus-nAb MN50

904

6365.6/12410.2 = 51.3%(46.8%, 55.8%)

150(132, 170)

273

871.3/1416.8 = 61.5%(53.3%, 69.1%)

210(164, 269)

10.2%(1.1%, 19.3%)

0.71(0.54, 0.94)

Day 29

Pseudovirus-nAb ID50

904

8231.8/12410.2 = 66.3%(61.9%, 70.5%)

106(91, 123)

273

1076.4/1416.8 = 76.0%(68.1%, 82.4%)

173(132, 227)

9.6%(1.3%, 18%)

0.61(0.45, 0.84)

Day 29

Pseudovirus-nAb ID80

904

9929.4/12410.2 = 80.0%(76.0%, 83.5%)

217(186, 253)

273

1220.6/1416.8 = 86.2%(79.4%, 90.9%)

337(255, 445)

6.1%(-0.6%, 12.9%)

0.64(0.47, 0.88)

Day 57

Anti N IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

402190(335224, 482533)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

860317(615674, 1202171)

0%(0%, 0%)

0.47(0.32, 0.68)

Day 57

Anti RBD IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

1074131(934344, 1234832)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

2681811(2105403, 3416023)

0%(0%, 0%)

0.40(0.30, 0.53)

Day 57

Anti Spike IgG (IU/ml)

904

12410.2/12410.2 = 100.0%(100.0%, 100.0%)

2349481(2085980, 2646267)

273

1416.8/1416.8 = 100.0%(100.0%, 100.0%)

5800314(4839344, 6952107)

0%(0%, 0%)

0.41(0.33, 0.50)

Day 57

Live virus-nAb MN50

904

10972.1/12410.2 = 88.4%(85.1%, 91.1%)

1465(1241, 1728)

273

1378.5/1416.8 = 97.3%(93.9%, 98.8%)

3827(3024, 4843)

8.9%(5.2%, 12.6%)

0.38(0.29, 0.51)

Day 57

Pseudovirus-nAb ID50

904

11856/12410.2 = 95.5%(93.5%, 97.0%)

1784(1481, 2148)

273

1368.2/1416.8 = 96.6%(92.0%, 98.6%)

4749(3360, 6714)

1%(-2.4%, 4.4%)

2077

0.38(0.25, 0.56)

Day 57

Pseudovirus-nAb ID80

904

12107.7/12410.2 = 97.6%(95.8%, 98.6%)

2900(2421, 3473)

273

1404.2/1416.8 = 99.1%(96.0%, 99.8%)

7806(5412, 11259)

1.6%(-0.3%, 3.5%)

0.37(0.25, 0.56)

Table 12. Antibody levels in the per-protocol cohort (placebo recipients)

Placebo Recipients

Baseline SARS-CoV-2 Negative

Baseline SARS-CoV-2 Positive

Comparison

Visit

Marker

N

Resp rate

GMT/GMC

N

Resp rate

GMT/GMC

Resp Rate Difference

GMTR/GMCR

Day 29

Anti N IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

12225(9438, 15835)

100%(100%, 100%)

0.00(0.00, 0.00)

Day 29

Anti RBD IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

11927(9430, 15085)

100%(100%, 100%)

0.00(0.00, 0.00)

Day 29

Anti Spike IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

18081(15037, 21741)

100%(100%, 100%)

0.00(0.00, 0.00)

Day 29

Live virus-nAb MN50

155

0/2373.7 = 0.0%(0.0%, 0.0%)

31(31, 31)

270

437.8/1337.3 = 32.7%(25.9%, 40.4%)

88(71, 108)

32.7%(25.4%, 40%)

0.35(0.29, 0.44)

Day 29

Pseudovirus-nAb ID50

155

0/2373.7 = 0.0%(0.0%, 0.0%)

5(5, 5)

270

691.9/1337.3 = 51.7%(43.7%, 59.7%)

51(40, 65)

51.7%(43.7%, 59.8%)

0.10(0.08, 0.13)

Day 29

Pseudovirus-nAb ID80

155

0/2373.7 = 0.0%(0.0%, 0.0%)

5(5, 5)

270

1047.7/1337.3 = 78.3%(70.9%, 84.3%)

150(114, 198)

78.3%(71.7%, 85%)

0.03(0.03, 0.05)

Day 57

Anti N IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

150527(109098, 207686)

100%(100%, 100%)

0.00(0.00, 0.00)

Day 57

Anti RBD IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

462227(354280, 603065)

100%(100%, 100%)

0.00(0.00, 0.00)

Day 57

Anti Spike IgG (IU/ml)

155

0/2373.7 = 0.0%(0.0%, 0.0%)

10(10, 10)

270

1337.3/1337.3 = 100.0%(100.0%, 100.0%)

723728(582826, 898695)

100%(100%, 100%)

0.00(0.00, 0.00)

Day 57

Live virus-nAb MN50

155

0/2373.7 = 0.0%(0.0%, 0.0%)

31(31, 31)

270

1006.4/1337.3 = 75.3%(67.2%, 81.9%)

595(443, 799)

75.3%(67.9%, 82.6%)

0.05(0.04, 0.07)

Day 57

Pseudovirus-nAb ID50

155

0/2373.7 = 0.0%(0.0%, 0.0%)

5(5, 5)

270

1121.5/1337.3 = 83.9%(76.3%, 89.3%)

521(364, 746)

83.9%(77.4%, 90.3%)

0.01(0.01, 0.01)

Day 57

Pseudovirus-nAb ID80

155

0/2373.7 = 0.0%(0.0%, 0.0%)

5(5, 5)

270

1293.4/1337.3 = 96.7%(91.4%, 98.8%)

1714(1251, 2350)

96.7%(93.5%, 99.9%)

0.00(0.00, 0.00)

Table 13. Antibody levels in the baseline SARS-CoV-2 negative per-protocol cohort (vaccine recipients)

Baseline SARS-CoV-2 Negative Vaccine Recipients

Non-Cases/Control

Cases*

Comparison

Visit

Marker

N

Resp rate

GMT/GMC

N

Resp rate

GMT/GMC

Resp Rate Difference

GMTR/GMCR

Day 29

Anti N IgG (IU/ml)

894

12337/12337 = 100.0%(100.0%, 100.0%)

24397(20958, 28399)

10

73.2/73.2 = 100.0%(100.0%, 100.0%)

13161(3939, 43978)

0%(0%, 0%)

1.85(0.55, 6.25)

Day 29

Anti RBD IgG (IU/ml)

894

12337/12337 = 100.0%(100.0%, 100.0%)

24897(21711, 28551)

10

73.2/73.2 = 100.0%(100.0%, 100.0%)

13062(6241, 27336)

0%(0%, 0%)

1.91(0.90, 4.04)

Day 29

Anti Spike IgG (IU/ml)

894

12337/12337 = 100.0%(100.0%, 100.0%)

46529(41517, 52145)

10

73.2/73.2 = 100.0%(100.0%, 100.0%)

18276(10842, 30809)

0%(0%, 0%)

2.55(1.49, 4.34)

Day 29

Live virus-nAb MN50

894

6332.6/12337 = 51.4%(46.9%, 55.9%)

150(132, 171)

10

33/73.2 = 50.0%(18.3%, 81.7%)

119(52, 276)

-1.4%(-34.1%, 31.3%)

1.26(0.54, 2.95)

Day 29

Pseudovirus-nAb ID50

894

8205.9/12337 = 66.6%(62.2%, 70.7%)

107(92, 124)

10

25.9/73.2 = 50.0%(18.3%, 81.7%)

38(17, 83)

-16.6%(-49.2%, 16.1%)

2.85(1.27, 6.41)

Day 29

Pseudovirus-nAb ID80

894

9867.2/12337 = 80.0%(76.0%, 83.5%)

217(186, 254)

10

62.2/73.2 = 90.0%(42.7%, 99.1%)

241(112, 520)

10%(-9.8%, 29.8%)

0.90(0.41, 1.97)

Day 57

Anti N IgG (IU/ml)

894

12337/12337 = 100.0%(100.0%, 100.0%)

406694(339027, 487867)

10

73.2/73.2 = 100.0%(100.0%, 100.0%)

93160(25382, 341924)

0%(0%, 0%)

4.37(1.17, 16.23)

Day 57

Anti RBD IgG (IU/ml)

894

12337/12337 = 100.0%(100.0%, 100.0%)

1083605(942656, 1245630)

10

73.2/73.2 = 100.0%(100.0%, 100.0%)

335181(113451, 990270)

0%(0%, 0%)

3.23(1.08, 9.64)

Day 57

Anti Spike IgG (IU/ml)

894

12337/12337 = 100.0%(100.0%, 100.0%)

2374666(2108766, 2674094)

10

73.2/73.2 = 100.0%(100.0%, 100.0%)

429724(169006, 1092644)

0%(0%, 0%)

5.53(2.16, 14.16)

Day 57

Live virus-nAb MN50

894

10913.8/12337 = 88.4%(85.1%, 91.1%)

1467(1243, 1731)

10

58.3/73.2 = 80.0%(38.2%, 96.3%)

1179(322, 4318)

-8.4%(-34.5%, 17.6%)

1.24(0.34, 4.61)

Day 57

Pseudovirus-nAb ID50

894

11811.9/12337 = 95.7%(93.7%, 97.1%)

1812(1505, 2181)

10

44/73.2 = 70.0%(31.4%, 92.3%)

173(41, 739)

-25.7%(-55.4%, 4%)

10.45(2.42, 45.05)

Day 57

Pseudovirus-nAb ID80

894

12045.5/12337 = 97.6%(95.8%, 98.7%)

2912(2432, 3487)

10

62.2/73.2 = 90.0%(42.7%, 99.1%)

1278(261, 6252)

-7.6%(-27.1%, 11.8%)

2.28(0.46, 11.26)

*Cases are baseline negative per-protocol vaccine recipients with the symptomatic infection COVID-19 primary endpoint diagnosed starting 7 days after the Day 57 study visit. Non-cases/Controls are baseline negative per-protocol vaccine recipients sampled into the random subcohort with no evidence of SARS-CoV-2 infection up to the time of data cut.

Table 14. Antibody levels in the baseline SARS-CoV-2 positive per-protocol cohort (vaccine recipients)

Baseline SARS-CoV-2 Positive Vaccine Recipients

Non-Cases/Control

Cases*

Comparison

Visit

Marker

N

Resp rate

GMT/GMC

N

Resp rate

GMT/GMC

Resp Rate Difference

GMTR/GMCR

Day 29

Anti N IgG (IU/ml)

272

1414.9/1414.9 = 100.0%(100.0%, 100.0%)

38991(28984, 52454)

1

1.9/1.9 = 100.0%

3787(3787, 3787)

0%(0%, 0%)

10.30(7.65, 13.85)

Day 29

Anti RBD IgG (IU/ml)

272

1414.9/1414.9 = 100.0%(100.0%, 100.0%)

40375(31120, 52384)

1

1.9/1.9 = 100.0%

26128(26128, 26128)

0%(0%, 0%)

1.55(1.19, 2.00)

Day 29

Anti Spike IgG (IU/ml)

272

1414.9/1414.9 = 100.0%(100.0%, 100.0%)

80292(65063, 99085)

1

1.9/1.9 = 100.0%

114815(114815, 114815)

0%(0%, 0%)

0.70(0.57, 0.86)

Day 29

Live virus-nAb MN50

272

869.4/1414.9 = 61.4%(53.1%, 69.1%)

210(164, 269)

1

1.9/1.9 = 100.0%

166(166, 166)

38.6%(30.6%, 46.6%)

1.27(0.99, 1.62)

Day 29

Pseudovirus-nAb ID50

272

1076.4/1414.9 = 76.1%(68.1%, 82.5%)

173(132, 227)

1

0/1.9 = 0.0%

35(35, 35)

-76.1%(-83.2%, -68.9%)

4.91(3.74, 6.44)

Day 29

Pseudovirus-nAb ID80

272

1218.7/1414.9 = 86.1%(79.4%, 90.9%)

337(255, 446)

1

1.9/1.9 = 100.0%

210(210, 210)

13.9%(8.2%, 19.6%)

1.60(1.21, 2.12)

Day 57

Anti N IgG (IU/ml)

272

1414.9/1414.9 = 100.0%(100.0%, 100.0%)

860725(615044, 1204543)

1

1.9/1.9 = 100.0%

103825(103825, 103825)

0%(0%, 0%)

8.29(5.92, 11.60)

Day 57

Anti RBD IgG (IU/ml)

272

1414.9/1414.9 = 100.0%(100.0%, 100.0%)

2688972(2110320, 3426292)

1

1.9/1.9 = 100.0%

150349(150349, 150349)

0%(0%, 0%)

17.88(14.04, 22.79)

Day 57

Anti Spike IgG (IU/ml)

272

1414.9/1414.9 = 100.0%(100.0%, 100.0%)

5786742(4824223, 6941300)

1

1.9/1.9 = 100.0%

8489850(8489850, 8489850)

0%(0%, 0%)

0.68(0.57, 0.82)

Day 57

Live virus-nAb MN50

272

1376.6/1414.9 = 97.3%(93.9%, 98.8%)

3845(3038, 4867)

1

1.9/1.9 = 100.0%

535(535, 535)

2.7%(0.5%, 4.9%)

7.18(5.68, 9.10)

Day 57

Pseudovirus-nAb ID50

272

1366.3/1414.9 = 96.6%(92.0%, 98.6%)

4747(3353, 6722)

1

1.9/1.9 = 100.0%

845(845, 845)

3.4%(0.5%, 6.4%)

5.61(3.97, 7.95)

Day 57

Pseudovirus-nAb ID80

272

1402.3/1414.9 = 99.1%(96.1%, 99.8%)

7813(5407, 11289)

1

1.9/1.9 = 100.0%

6552(6552, 6552)

0.9%(-0.4%, 2.2%)

1.19(0.83, 1.72)

*Cases are baseline positive per-protocol vaccine recipients with the symptomatic infection COVID-19 primary endpoint diagnosed starting 7 days after the Day 57 study visit. Non-cases/Controls are baseline negative per-protocol vaccine recipients sampled into the random subcohort with no evidence of SARS-CoV-2 infection up to the time of data cut.

Table 15. Antibody levels in the baseline SARS-CoV-2 positive per-protocol cohort (placebo recipients)

Baseline SARS-CoV-2 Positive Placebo Recipients

Non-Cases/Control

Cases*

Comparison

Visit

Marker

N

Resp rate

GMT/GMC

N

Resp rate

GMT/GMC

Resp Rate Difference

GMTR/GMCR

Day 29

Anti N IgG (IU/ml)

269

1335.5/1335.5 = 100.0%(100.0%, 100.0%)

12154(9340, 15817)

1

1.9/1.9 = 100.0%

1924(1924, 1924)

0%(0%, 0%)

6.32(4.85, 8.22)

Day 29

Anti RBD IgG (IU/ml)

269

1335.5/1335.5 = 100.0%(100.0%, 100.0%)

11798(9288, 14986)

1

1.9/1.9 = 100.0%

1056(1056, 1056)

0%(0%, 0%)

11.17(8.80, 14.19)

Day 29

Anti Spike IgG (IU/ml)

269

1335.5/1335.5 = 100.0%(100.0%, 100.0%)

17917(14848, 21621)

1

1.9/1.9 = 100.0%

2888(2888, 2888)

0%(0%, 0%)

6.20(5.14, 7.49)

Day 29

Live virus-nAb MN50

269

437.8/1335.5 = 32.6%(25.6%, 40.5%)

88(71, 108)

1

0/1.9 = 0.0%

31(31, 31)

-32.6%(-40%, -25.2%)

2.82(2.28, 3.48)

Day 29

Pseudovirus-nAb ID50

269

691.9/1335.5 = 51.6%(43.4%, 59.8%)

51(39, 65)

1

0/1.9 = 0.0%

5(5, 5)

-51.6%(-59.9%, -43.4%)

10.11(7.85, 13.02)

Day 29

Pseudovirus-nAb ID80

269

1047.7/1335.5 = 78.5%(70.8%, 84.5%)

151(114, 200)

1

0/1.9 = 0.0%

5(5, 5)

-78.5%(-85.3%, -71.7%)

30.12(22.73, 39.92)

Day 57

Anti N IgG (IU/ml)

269

1335.5/1335.5 = 100.0%(100.0%, 100.0%)

149599(107630, 207934)

1

1.9/1.9 = 100.0%

9179(9179, 9179)

0%(0%, 0%)

16.30(11.73, 22.65)

Day 57

Anti RBD IgG (IU/ml)

269

1335.5/1335.5 = 100.0%(100.0%, 100.0%)

459815(350257, 603642)

1

1.9/1.9 = 100.0%

20114(20114, 20114)

0%(0%, 0%)

22.86(17.41, 30.01)

Day 57

Anti Spike IgG (IU/ml)

269

1335.5/1335.5 = 100.0%(100.0%, 100.0%)

715893(574830, 891572)

1

1.9/1.9 = 100.0%

280285(280285, 280285)

0%(0%, 0%)

2.55(2.05, 3.18)

Day 57

Live virus-nAb MN50

269

1006.4/1335.5 = 75.2%(67.0%, 82.0%)

591(438, 797)

1

0/1.9 = 0.0%

31(31, 31)

-75.2%(-82.7%, -67.8%)

19.01(14.09, 25.65)

Day 57

Pseudovirus-nAb ID50

269

1121.5/1335.5 = 83.8%(76.1%, 89.4%)

517(358, 746)

1

0/1.9 = 0.0%

5(5, 5)

-83.8%(-90.4%, -77.3%)

103.37(71.60, 149.23)

Day 57

Pseudovirus-nAb ID80

269

1293.4/1335.5 = 96.8%(91.2%, 98.9%)

1712(1241, 2361)

1

0/1.9 = 0.0%

5(5, 5)

-96.8%(-100.1%, -93.5%)

342.34(248.16, 472.26)

*Cases are baseline negative per-protocol vaccine recipients with the symptomatic infection COVID-19 primary endpoint diagnosed starting 7 days after the Day 57 study visit. Non-cases/Controls are baseline negative per-protocol vaccine recipients sampled into the random subcohort with no evidence of SARS-CoV-2 infection up to the time of data cut.