

## Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Bradley T, Grundberg E, Selvarangan R, et al. Antibody responses after a single dose of SARS-CoV-2 mRNA vaccine. *N Engl J Med*. DOI: [10.1056/NEJMc2102051](https://doi.org/10.1056/NEJMc2102051)

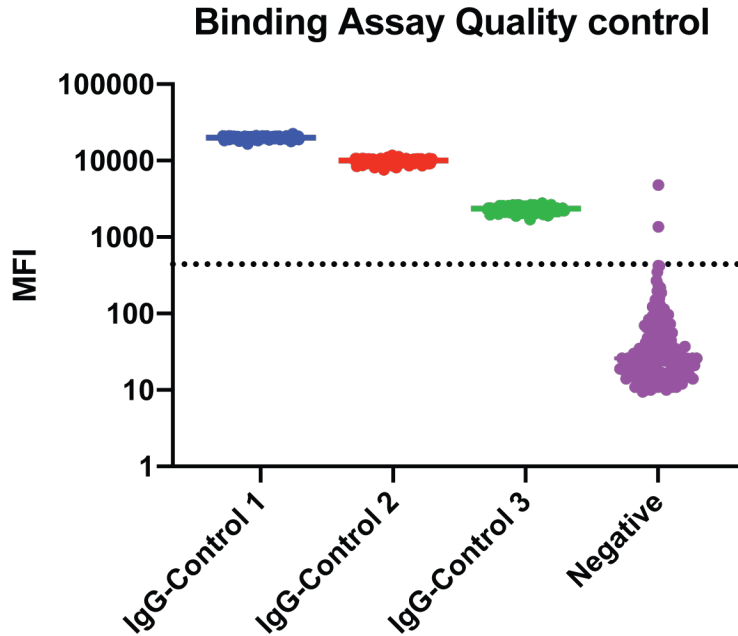
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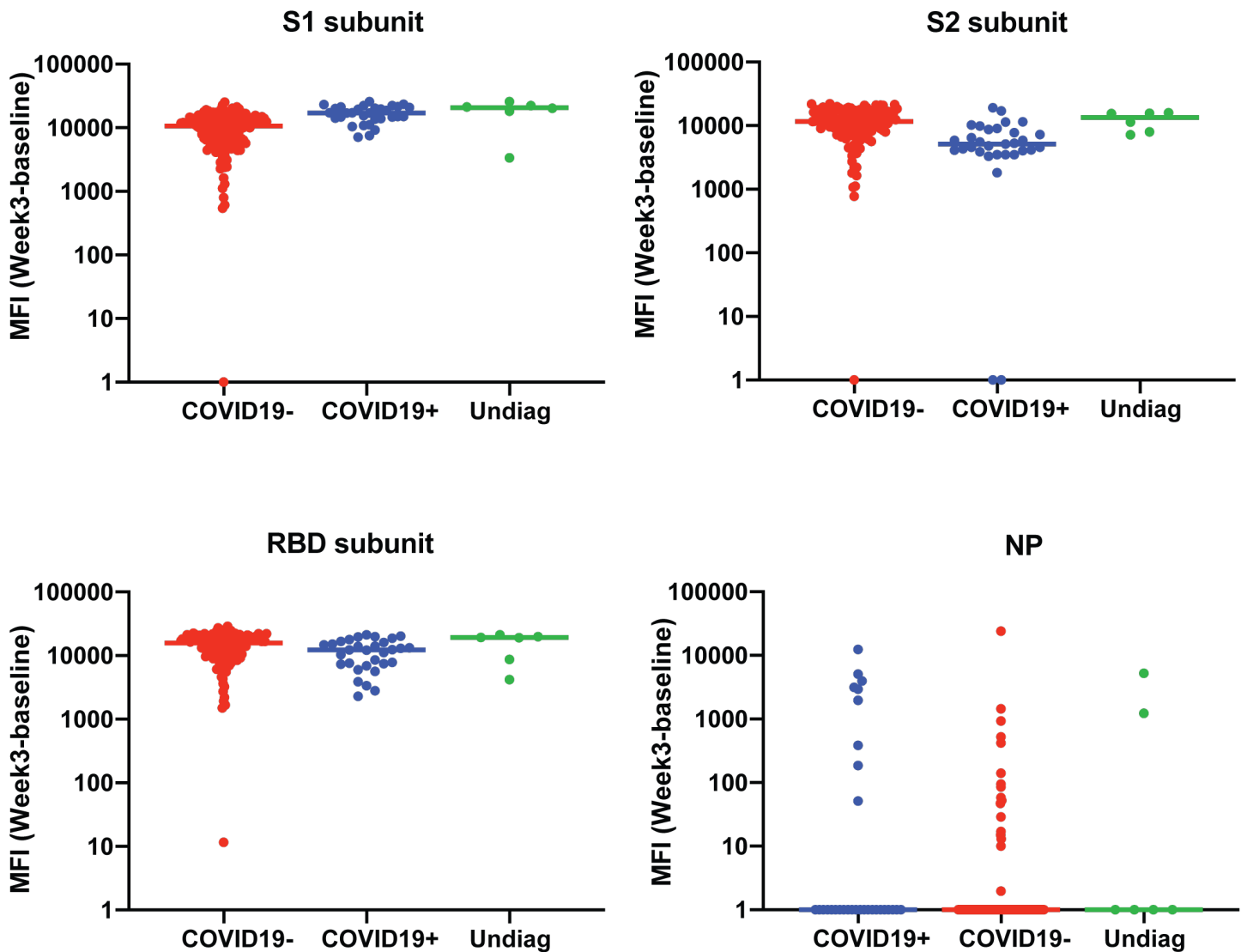
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**Figure S1. Intensity of quality control beads for multiplex binding assay.** Positive control beads complexed with IgG at 3 concentrations (IgG-Control 1, 95% CI, 19,936 to 20,115; IgG-Control 2, 95% CI, 9,961 to 10,206; IgG-Control 3, 95% CI, 2,343 to 2,389) or beads not coated with antigen (Negative, 95% CI, 24.0 to 27.0) are run with each plasma sample for quality control. Each dot represents the MFI for the controls ran with each plasma sample. The sum of the average and standard deviation of the negative control beads were utilized to determine a threshold of binding (dashed line). This threshold is shown on all graphs.



**Figure S2. Magnitude of change of antibody binding in each individual at week 3 from baseline.** Multiplex bead-based antibody binding assay that measures the IgG antibody response to 4 SARS-CoV-2 viral antigen subunits (S1, S2, RBD and NP). Median Fluorescent Intensity (MFI) is reported that has been background subtracted and MFI at week3 and at baseline were subtracted (Week3-baseline) in order to show individual-level magnitude of change of immunization with SARS-CoV-2 vaccine. Each dot represents an individual. Bars represent group median. Individuals at baseline with history of infection (blue), no history of infection (red) and possible undiagnosed infection (green).

**Table S1. Study participant demographics**

	<b>Seropositive</b> (COVID19+; N=36)	<b>Seronegative</b> (COVID19-; N=152)
<b>Age</b>	Median 38 years old Range 25-73 years old	Median 46 years old Range 22-75 years old
<b>Gender</b>	Male: 4 Female: 32	Male: 46 Female: 105
<b>Race</b>	White: 34 Black or African American: 0 American Indian or Alaska Native: 0 Asian: 2 Native Hawaiian or Other Pacific Islander: 0 Multiracial: 0 Unknown: 0	White: 133 Black or African American: 3 American Indian or Alaska Native: 0 Asian: 7 Native Hawaiian or Other Pacific Islander: 0 Multiracial: 5 Unknown: 4
<b>Ethnicity</b>	Hispanic or Latino: 5 Not Hispanic or Latino: 30 Unknown: 1	Hispanic or Latino: 10 Not Hispanic or Latino: 129 Unknown: 13

**Table S2. 95% Confidence interval of median of binding antibody responses**

<b>COVID19-</b>	<b>Baseline</b>	<b>Week3</b>
<b>S1</b>	Lower: 13.7 Upper: 20.0	Lower: 9,170 Upper: 11,757
<b>S2</b>	Lower: 734.8 Upper: 1,089	Lower: 11,687 Upper: 14,909
<b>RBD</b>	Lower: 174.0 Upper: 272.0	Lower: 13,818 Upper: 17,350
<b>NP</b>	Lower: 409.5 Upper: 609.8	Lower: 279.3 Upper: 378.3

<b>COVID19+</b>	<b>Baseline</b>	<b>Week3</b>
<b>S1</b>	Lower: 5,837 Upper: 8,345	Lower: 24,799 Upper: 27,033
<b>S2</b>	Lower: 20,476 Upper: 24,997	Lower: 27,955 Upper: 30,124
<b>RBD</b>	Lower: 11,651 Upper: 16,667	Lower: 26,031 Upper: 27,186
<b>NP</b>	Lower: 15,901 Upper: 23,004	Lower: 12,464 Upper: 22,868