

Supplementary Materials for

Neutralizing antibody responses elicited by SARS-CoV-2 mRNA vaccination wane over time and are boosted by breakthrough infection

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The PDF file includes:

Figs. S1 and S2

Other Supplementary Material for this manuscript includes the following:

MDAR Reproducibility Checklist
Data file S1

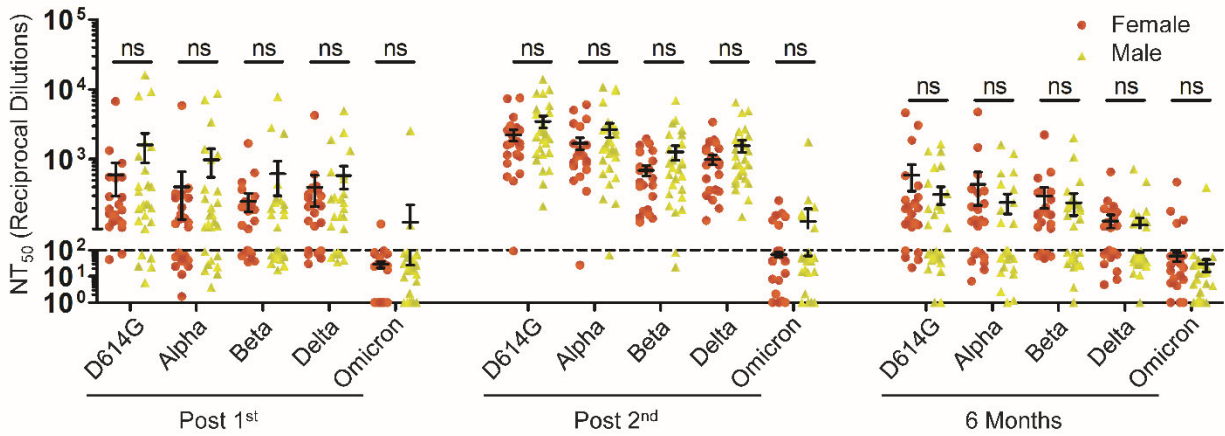


Fig. S1. Sex did not impact neutralizing antibody responses elicited by mRNA vaccination.

Neutralizing titer 50% (NT₅₀) values for male (n = 26) and female (n = 22) health care workers (HCWs) were measured against indicated spike protein-pseudotyped lentiviruses at three time points post-vaccination; the horizontal dashed line indicates the limit of detection (NT₅₀ < 100). Significance was determined by two-way repeated-measures analysis of variance (ANOVA) with Bonferroni's correction; error bars represent means ± standard errors. ns: not significant.

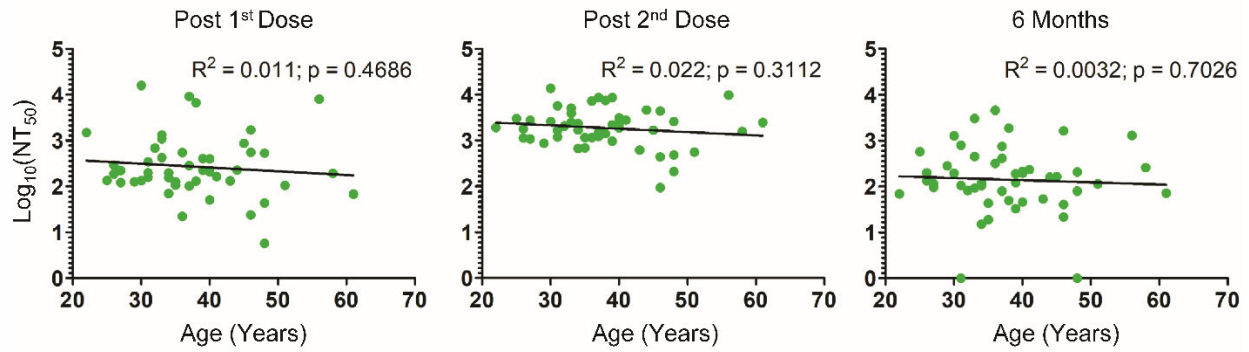


Fig. S2. Age did not impact neutralizing antibody responses elicited by mRNA vaccination.

Log_{10} -transformed NT_{50} titers against D614G-SARS-CoV-2 spike protein-pseudotyped lentivirus were plotted against age (in years) for HCW samples ($n=48$) collected post-first vaccine dose (left), post-second vaccine dose (middle), and six months post-second vaccine dose (right), with goodness of fit (R^2) and significance (p -value) displayed as determined by linear regression with least-squares residual fit.

Data file S1. NT₅₀ values. NT₅₀ values are included for 48 HCWs for sample collections pre-vaccination, post-first mRNA vaccine dose, post-second mRNA vaccine dose, and 6 months post-second mRNA vaccine dose against pseudotyped lentivirus bearing the S of the D614G, Alpha, Beta, Delta, and Omicron SARS-CoV-2 variants. Additionally, the timing of anti-N positivity for 12 HCWs is indicated. The second tab includes descriptive documentation of column headers.