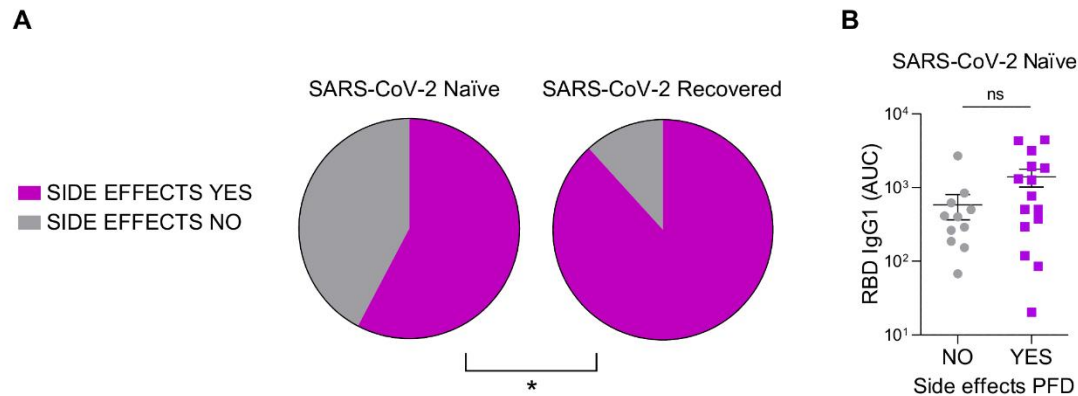
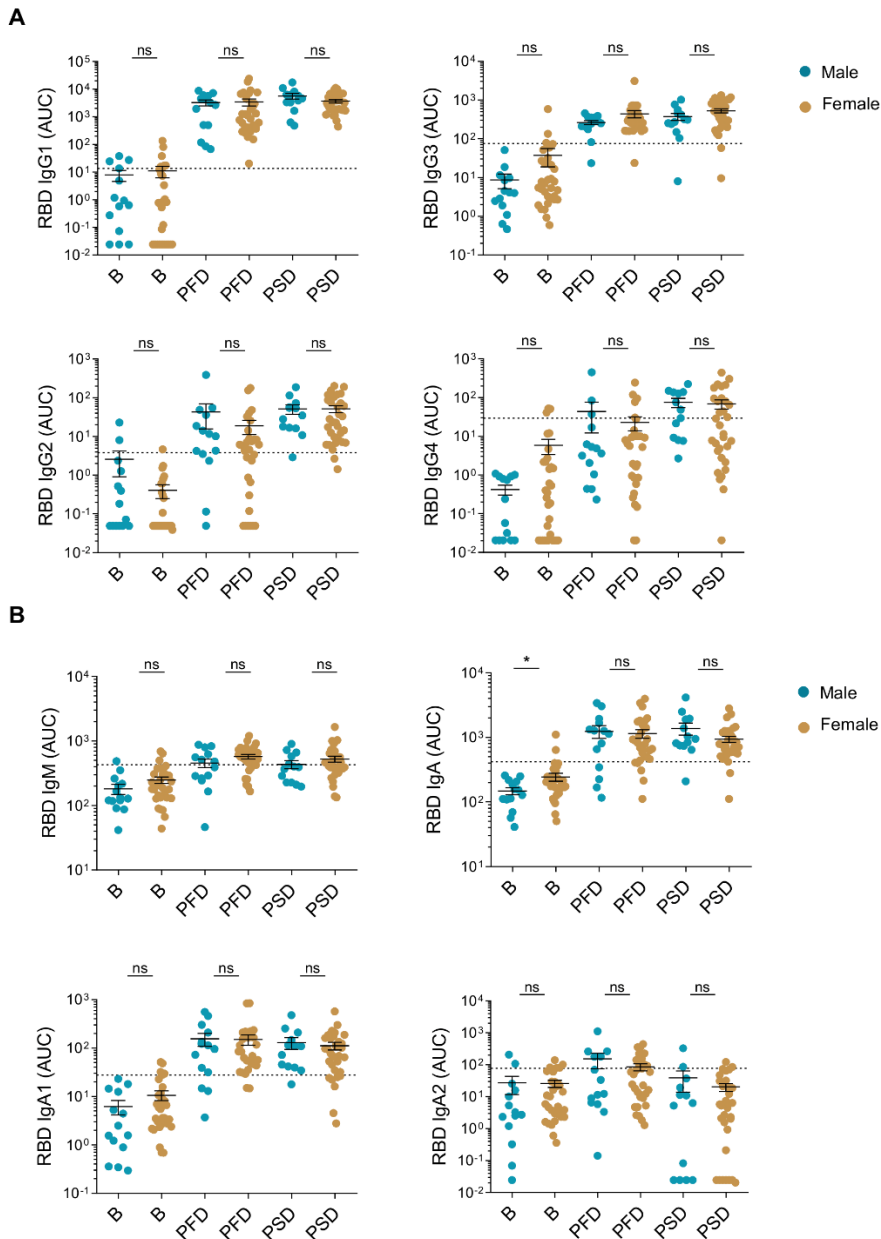


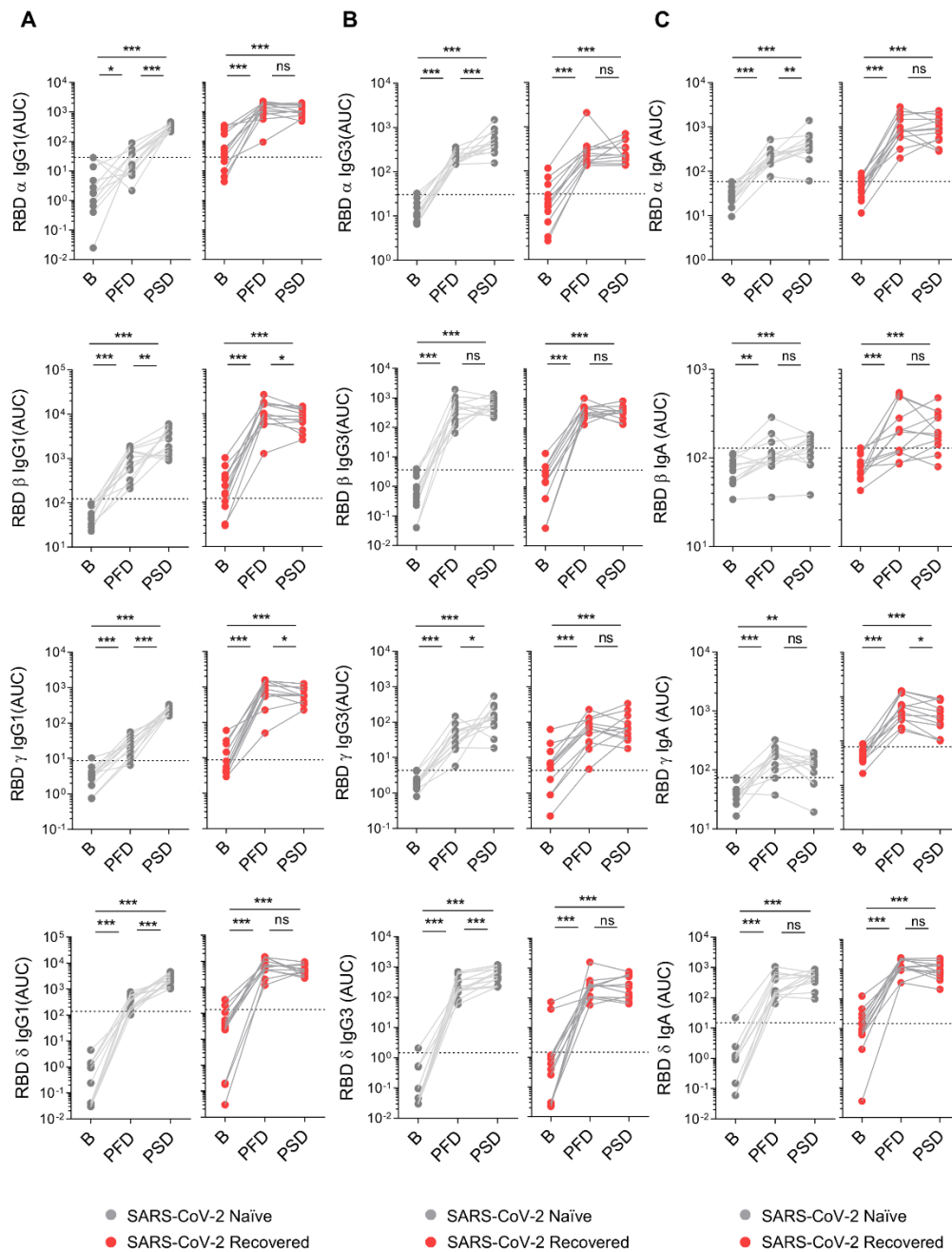
Supplementary Material



Supplementary Figure 1. SARS-CoV-2 recovered individuals experience side effects in higher proportion that naïve individuals upon primary immunization. (A) Distribution of SARS-CoV-2 naïve (left) and recovered (right) individuals that experienced side effects upon primary immunization. SARS-CoV-2 naïve individuals: side effects yes ($n=15$), side effects no ($n=11$). SARS-CoV-2 recovered individuals: side effects yes ($n=15$), side effects no ($n=2$). Fisher's exact test, two-sided, was performed to compare the distribution of SARS-CoV-2 naïve and recovered individuals with side effects. (B) AUC for the RBD-specific IgG1 subclass analyzed from SARS-CoV-2 naïve individuals segregated according to the presence (YES) or absence (NO) of side effects upon primary immunization. Bars represent mean \pm standard error mean (SEM). Two-tailed Mann-Whitney U test was performed to compare antibody responses in naïve individuals with and without side effects (ns, non-significant ($P > 0.05$), * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$, and **** $P < 0.0001$). SARS-CoV-2 naïve, $n=26$; SARS CoV-2 recovered, $n=17$.



Supplementary Figure 2. mRNA-1273 vaccination induces antibody responses irrespective of the gender of the individuals. (A) Area under the curve (AUC) for each of the WT RBD-specific IgG subclasses analyzed from male and female individuals overtime. (B) Area under the curve (AUC) for each of the WT RBD-specific IgM, IgA and IgA subclasses analyzed from male and female individuals overtime. SARS-CoV-2 naïve individuals at baseline were used to establish negative threshold values defined as the naïve AUC mean plus 2 times the standard deviation of the mean. Bars represent mean \pm standard error mean (SEM). Dashed line indicates negative threshold. Data are presented as individual dots. Two-tailed Mann-Whitney U test was performed to compare antibody responses between male and female (ns, non-significant ($P > 0.05$), * $P < 0.05$, ** $P < 0.01$, and *** $P < 0.001$). Male, $n=14$; Female, $n=32$.



Supplementary Figure 3. mRNA-1273 vaccination does not trigger a recall response in SARS-CoV-2 recovered individuals against the variants of concern. (A) AUC for IgG1, (B) IgG3, and (C) IgA antibodies against the RBD of α , β , γ and δ variants analyzed from SARS-CoV-2 naïve (left) and recovered (right) individuals overtime. Sera from SARS-CoV-2 naïve individuals at baseline were used to establish negative threshold values defined as the naïve AUC mean plus 2 times the standard deviation of the mean. Dashed line indicates negative threshold. Data are presented as individual dots. Wilcoxon matched pairs test was performed to compare time points (ns, non-significant ($P > 0.05$), * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$, and **** $P < 0.0001$). SARS-CoV-2 naïve, $n=12$; SARS CoV-2 recovered, $n=12$.