Supplementary Material

**Prior vaccination exceeds prior infection in eliciting innate and humoral immune responses in Omicron infected outpatients**

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## Supplementary Figures

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**Supplementary Figure 1.** **Antibody response of Omicron patients. (A)** Plasma IgG antibody binding the SARS-CoV-2 RBD (spike) from different strains in the no vaccinated and vaccinated Omicron patients without or with prior infection experience. (**B**) Neutralizing antibody response to virus spike protein of SARS-CoV-2 variants. *p*-value between two groups is from one-tailed Mann-Whitney t-test. Black Asterix shows significance between days in the same group, blue ones do significance of days 1-3 between groups, and purple ones do significance of days 12-15 between groups. \**p* < 0.05, \*\**p* < 0.01, \*\*\**p* < 0, \*\*\*\**P* < 0.0001. Line at median.

**Supplementary tables**

**Supplementary Table 1.** List of significantly up-regulated genes in no vaccination cohort compared to vaccination cohort at Days1-2 after infection, log2 (fold change) and adjusted *p*-value.