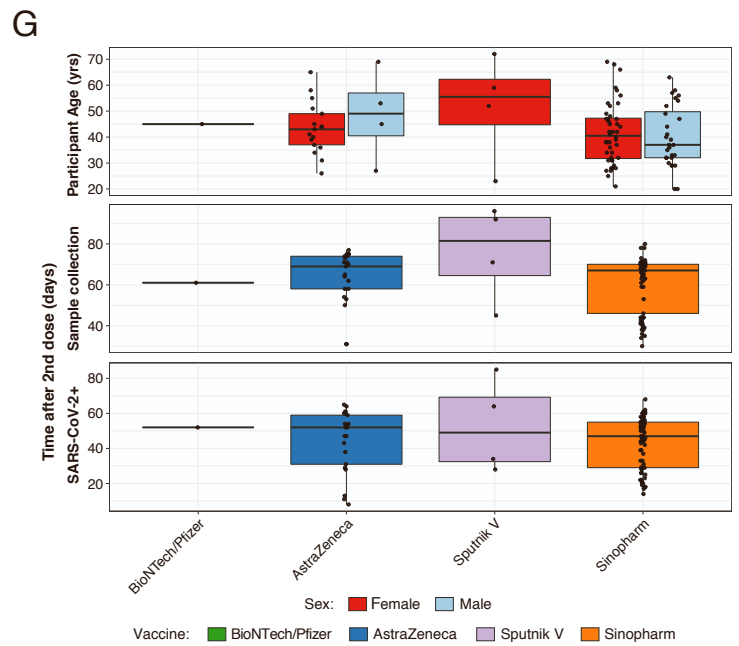
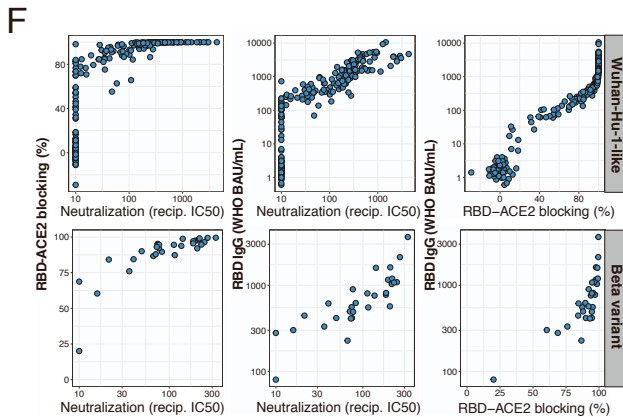
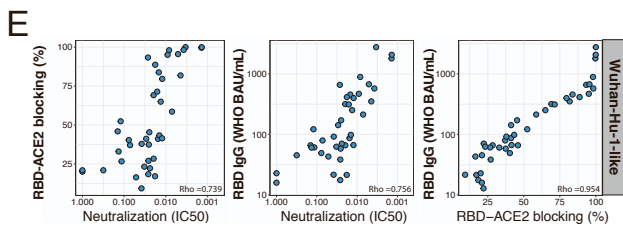
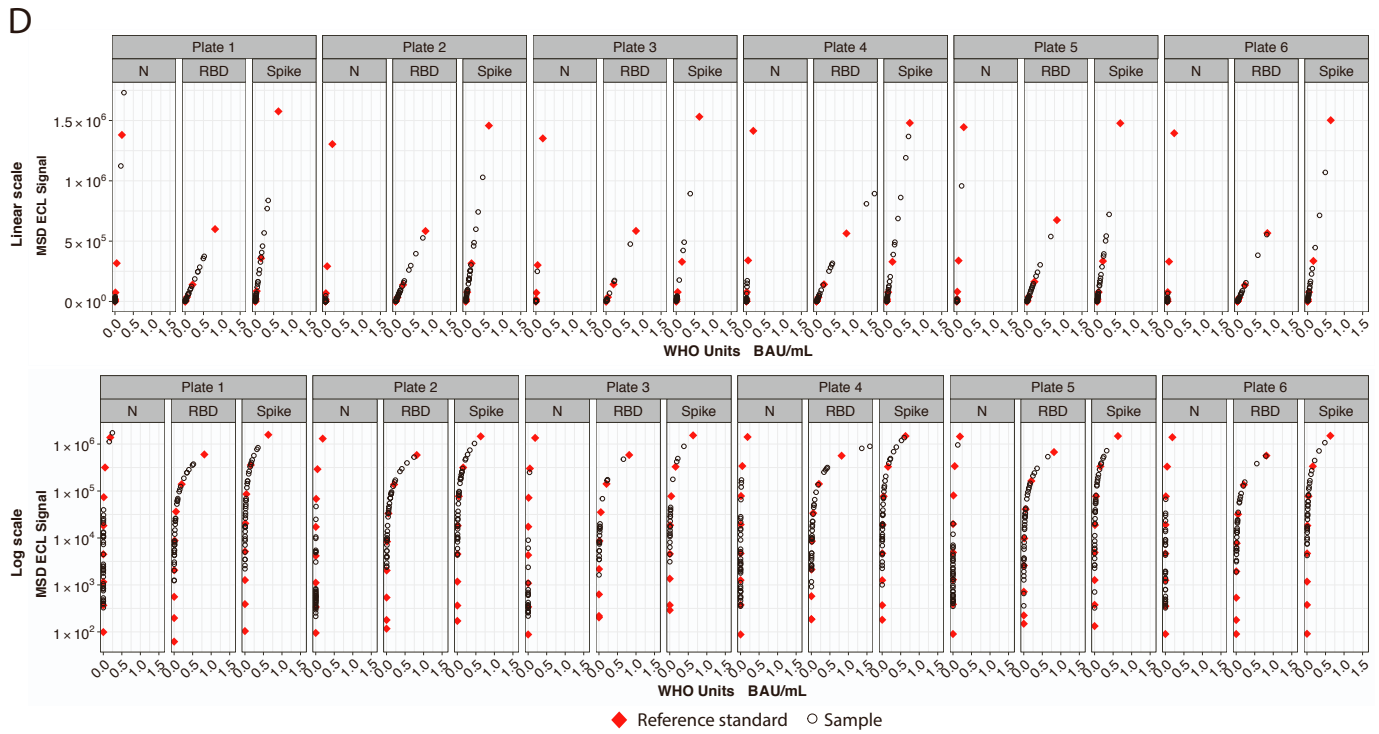
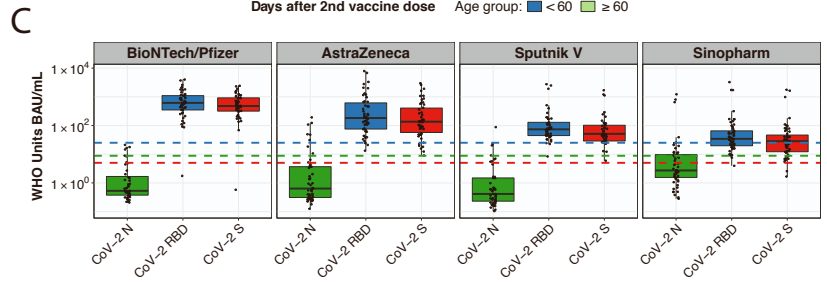
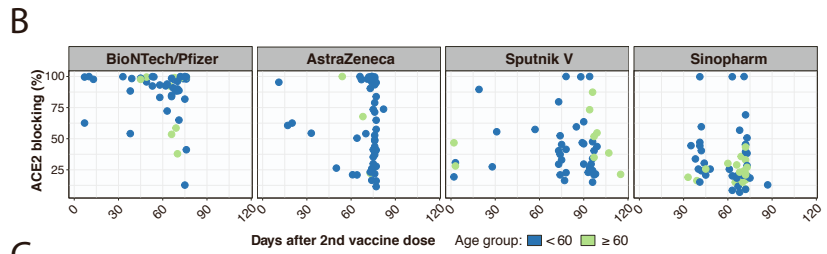
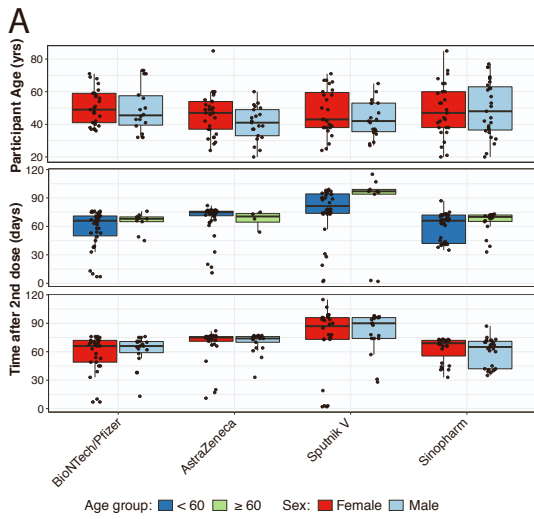


Supplemental information

Direct comparison of antibody responses to four SARS-CoV-2 vaccines in Mongolia

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Supplemental Figure. Concentrations of IgG antibodies specific for SARS-CoV-2 proteins, and correlations with ACE2 blocking and pseudotyped neutralization assays with Wuhan-Hu-1 antigens, related to Figure 1. (A) Demographics and post-vaccination sampling times for 196 vaccine recipients. (Upper panel) Age of vaccinees stratified by sex. (Middle panel) Plasma time points sampled after second vaccine dose for participants <60 years old or ≥60 years old. (Lower panel) Plasma time points sampled for participants stratified by sex. (B) Vaccine-induced RBD-ACE2 blocking percentages are shown for plasma time points sampled after second vaccine dose for participants stratified by age group (<60 years old or ≥60 years old). (C) SARS-CoV-2 nucleocapsid (N), RBD and spike (S)-binding IgG concentrations in vaccine recipient plasmas. Dashed lines show the cut-off values for positive test results for each antigen (green=nucleocapsid, blue=RBD, red=spike). (D) ECL values for the MSD reference standard (red diamonds) and the measured samples (black dots) are shown on linear (upper panels) and log (lower panels) scales for each assay plate. (E) Correlations between RBD-ACE2 blocking antibody assay, lentiviral pseudotyped neutralization assay, and anti-RBD IgG results for selected samples from Mongolian vaccinees. (F) Correlations between RBD-ACE2 blocking antibody assay, SARS-CoV-2 live virus neutralization assay, and anti-RBD IgG results for selected samples from BioNTech/Pfizer vaccinees for Wuhan-Hu-1-like antigens (upper panels) and Beta variant antigens (lower panels). (G) Demographics as well as post-vaccination sampling and SARS-CoV-2 infection times for 99 vaccine recipients with breakthrough infections. (Upper panel) Age stratified by sex. (middle panel) Plasma time points sampled after second vaccine dose, and (lower panel) SARS-CoV-2 infection time points after second vaccine dose.