

Supplemental information

**Ad26.COVS.S breakthrough infections induce high
titers of neutralizing antibodies against
Omicron and other SARS-CoV-2 variants of concern**

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Supplementary Information

Table S1: Study participant details relating to Figure 1, 2 and 3

PTID^a	Month of Vaccination	Age range at Vaccination	Gender	Month of BTI^b	Severity of infection
BTI01	2021/02	56-60	F	2021/06	Mild
BTI02	2021/02	36-40	F	2021/06	Mild
BTI03	2021/02	36-40	F	2021/07	Mild
BTI04	2021/02	56-60	F	2021/07	Mild
BTI05	2021/03	31-35	F	2021/08	Mild
BTI06*	2021/02	31-35	M	2021/07	Mild
V01	2021/03	56-60	F	N/A	N/A
V02	2021/03	31-35	F	N/A	N/A
V03	2021/03	31-35	M	N/A	N/A
V04	2021/03	26-30	F	N/A	N/A
V05	2021/03	31-35	M	N/A	N/A
V06	2021/03	31-35	F	N/A	N/A
V07	2021/03	51-55	F	N/A	N/A
V08	2021/03	26-30	F	N/A	N/A
V09	2021/03	31-35	F	N/A	N/A
V10	2021/03	26-30	F	N/A	N/A
V11	2021/03	26-30	F	N/A	N/A
V12	2021/03	36-40	F	N/A	N/A
V13	2021/03	26-30	F	N/A	N/A

^a Participant identifier (PTID)

^b Breakthrough infection (BTI)

* No longitudinal samples available, only 2- and 6-month post-vaccination samples

N/A: Not applicable

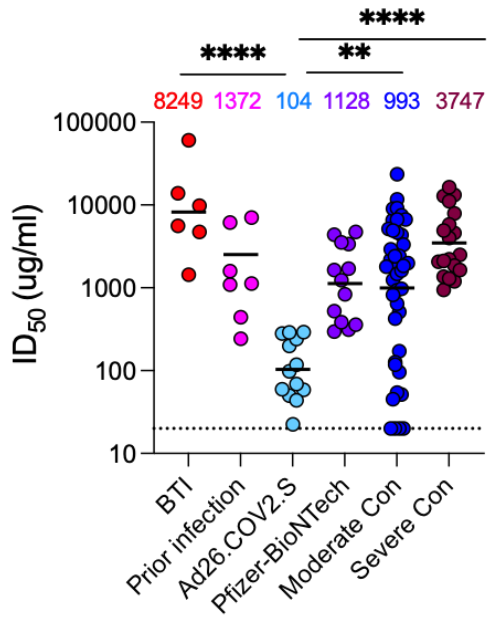


Figure. S1: BTI neutralization responses to the D614G variant compared to vaccinees and convalescent plasma related to Figure 3. Neutralization ID₅₀ titers of two-dose Pfizer-BioNTech (2-months post-vaccination) and one-dose Ad26.COVS vaccinees (2-months post-vaccination) and hospitalised convalescent individuals with moderate and severe infection 10-days after a positive PCR test are shown compared to BTI individuals (1-month post-infection). Individuals who were previously infected by SARS-CoV-2 prior to Ad26.CoV2.S vaccination are shown 2-months post-vaccination. Limit of detection is indicated by a dotted line. GMT is indicated by the black bars and above the plot, while significant differences between groups, as calculated by Kruskal-Wallis ANOVA with Dunns correction, are shown above the graph with with ** denoting p<0.01 and **** denoting p<0.0001.