

Supplementary information

Clinical and immune response characteristics among vaccinated persons infected with SARS-CoV-2 delta variant: a retrospective study

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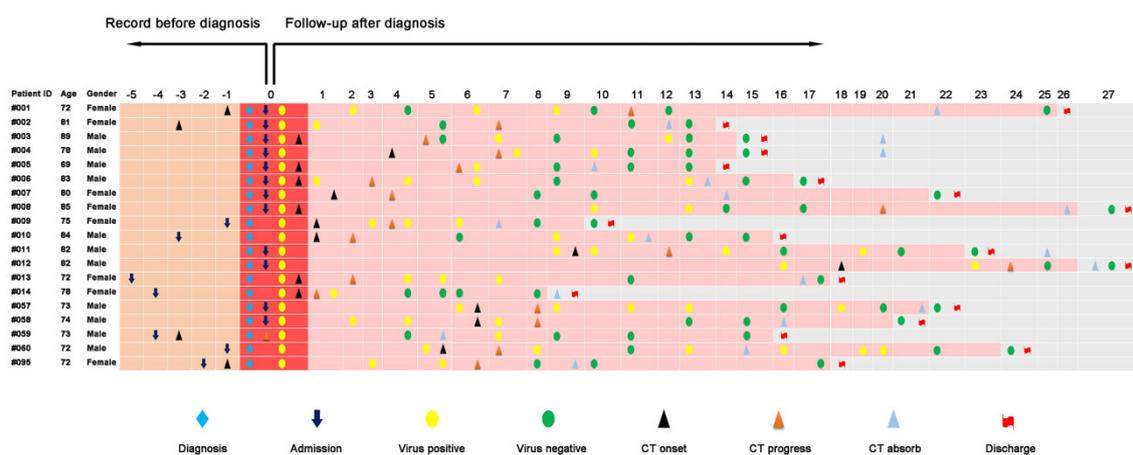


Fig. S1 Dynamic clinical assessment of patients with severe/critical illness in the unvaccinated group, one-dose group, and two-doses group. The rhombuses represent the time of diagnosis. The arrows represent admission. The yellow and green ovals represent the days on which RT-PCR tests for viral RNA returned positive and negative results, respectively. The black, brown, and blue triangles represent the onset, progression, and absorption of chest CT abnormalities, respectively. The red flags represent discharge from hospital. RT-PCR: real-time reverse transcription polymerase chain reaction; CT: computed tomography.

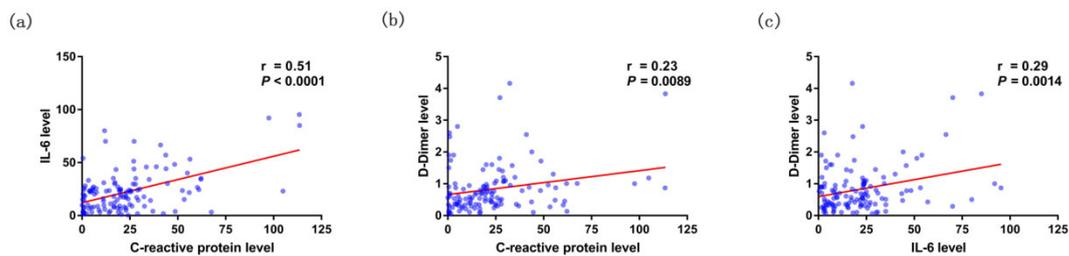


Fig. S2 Correlations between CRP, IL-6, and D-dimer levels. Scatter plots of the pair-wise correlations among CRP, IL-6, and D-dimer. (a) IL-6 vs. CRP; (b) D-dimer vs. CRP; (c) D-dimer vs. IL-6. Each point represents the CRP, IL-6, and D-dimer levels of one sample. r and P values were calculated with the Pearson correlation test. CRP: C-reactive protein; IL-6: interleukin-6.

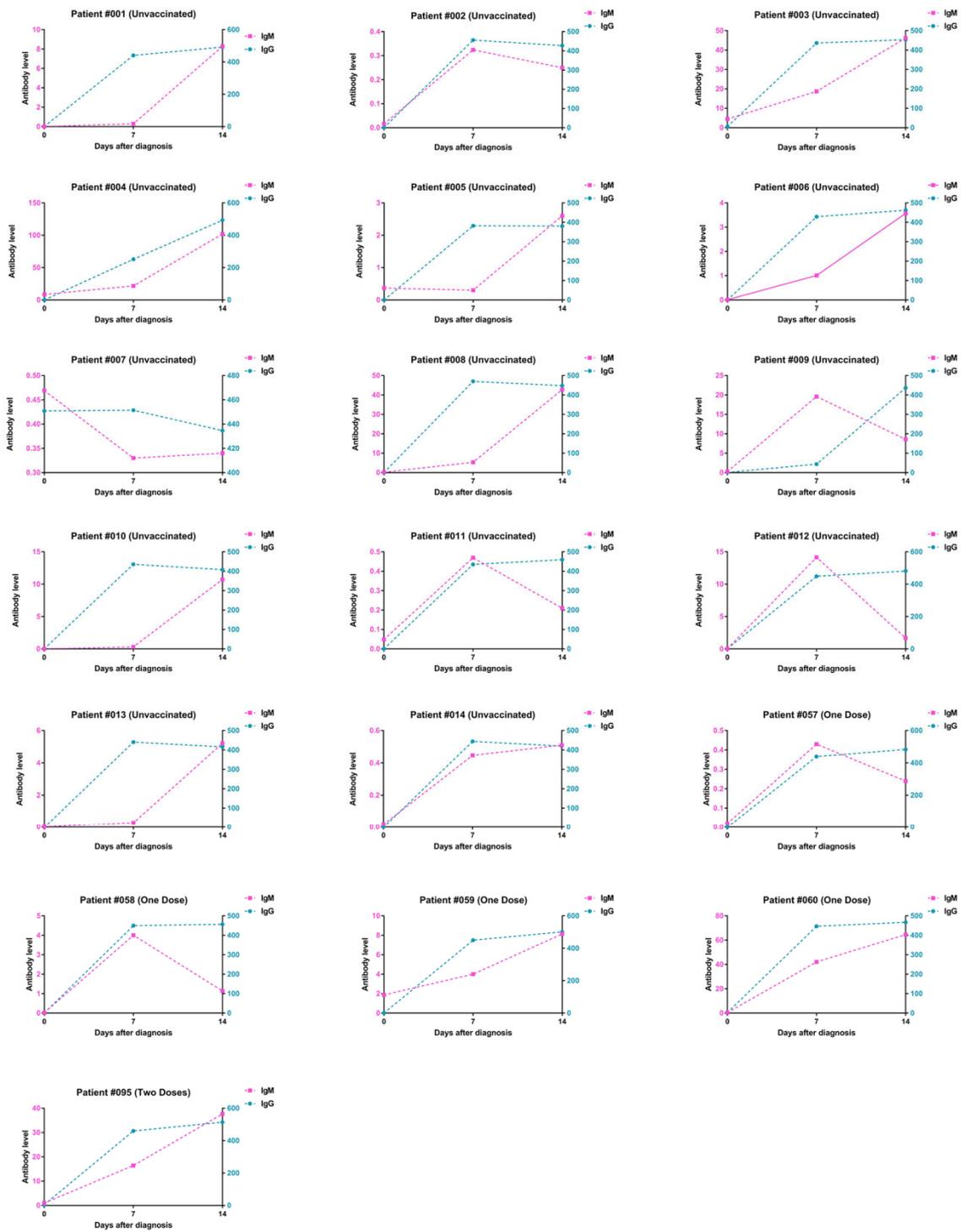


Fig. S3 Dynamic changes in total antibody levels in patients with severe/critical illness in the unvaccinated, one-dose, and two-doses groups. The x-axes use a relative time scale, starting with each patient's own time of diagnosis. Tests for IgM and IgG levels were repeated at 7 and 14 d after diagnosis. The purple dots represent IgM levels, and the cyan dots represent IgG levels. Unvaccinated group, $n=14$; one-dose group, $n=4$; and two-doses group, $n=1$.

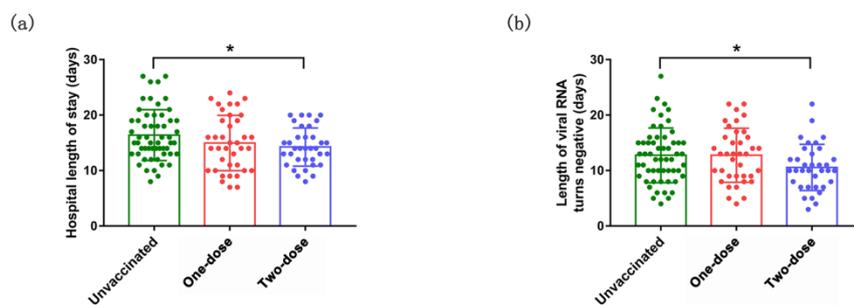


Fig. S4 (a) Length of hospital stay in the unvaccinated, one-dose, and two-doses groups. (b) Time until negative conversion of viral RNA test results after diagnosis in the unvaccinated, one-dose, and two-doses groups. Data are expressed as mean±SD. One-way ANOVA followed by post hoc Tukey test, $F_{(2,126)}=1.09$ (a) and $F_{(2,126)}=2.43$ (b). Unvaccinated group, $n=56$; one-dose group, $n=38$; and two-doses group, $n=35$. SD: standard deviation; ANOVA: analysis of variance.

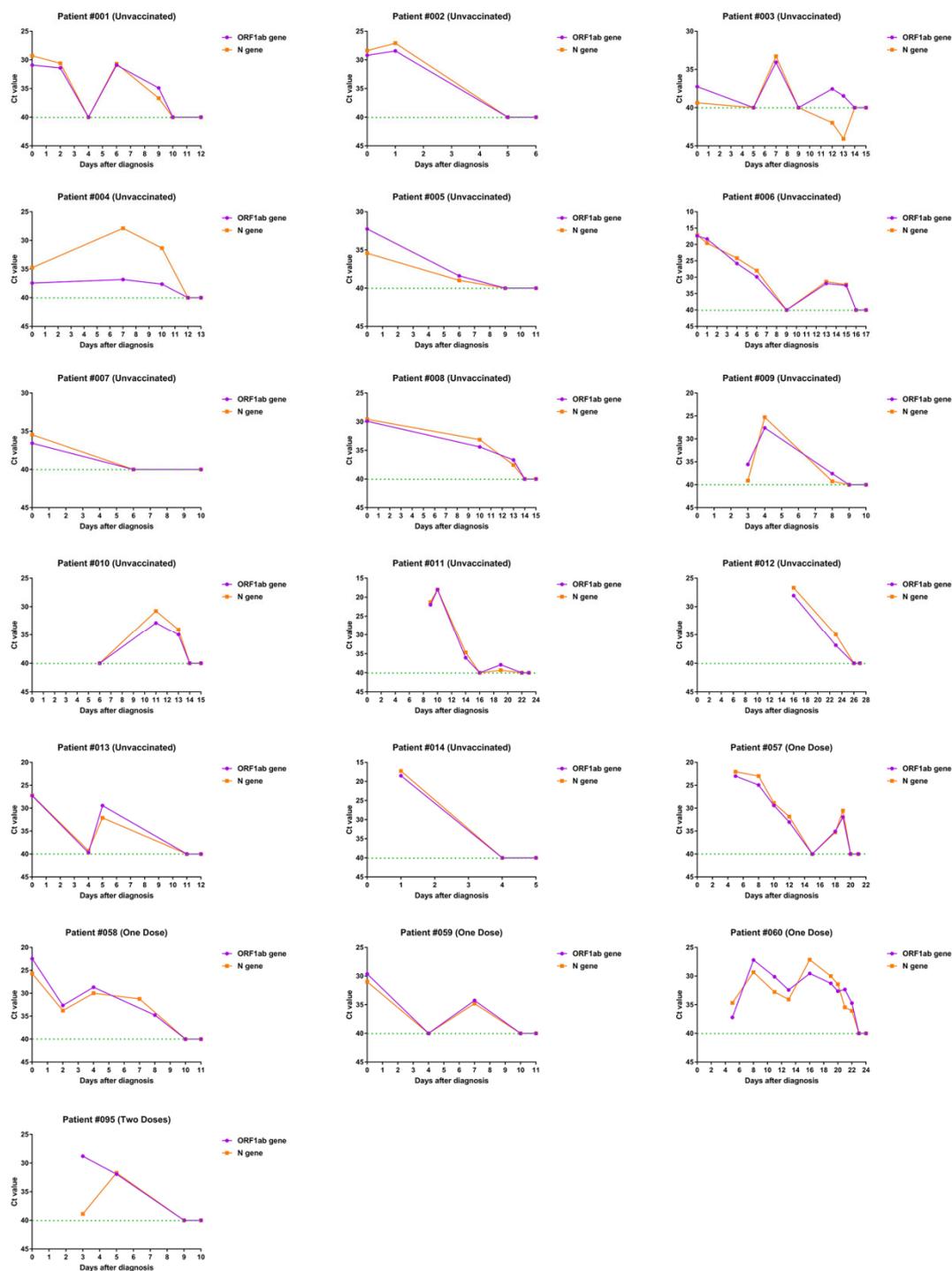


Fig. S5 Dynamic changes in virus detection C_t values in patients with severe/critical illness in the unvaccinated, one-dose, and two-doses groups. The x-axes use a relative time scale, starting with each patient's own time of diagnosis and recording the time of each repeated test. The purple markers and lines show the *ORF1ab* gene, and the yellow markers and lines show the *N* gene. A C_t value <40 was defined as SARS-CoV-2 viral positive. Unvaccinated group, $n=14$; one-dose group, $n=4$; and two-doses group, $n=1$. C_t : cycle threshold; SARS-CoV-2: severe acute respiratory syndrome coronavirus 2; *ORF1ab*: open reading frame 1ab.