Supplementary

**Figure S1** Correlation between SARS-CoV-2 abundance and Ct values. Pearson correlation and the corresponding r and P values are indicated. Each plot includes a total of 4 COVID-19 patients URT samples. Ct, cycle threshold; URT, upper respiratory tract; RPM, reads per million.

**Figure S2** Comparisons of serum IL-6 level between case 1 and case 2. Blue represents case 1; dark orange represents case 2. IL, interleukin.
**Figure S3** Bubble chart of the correlation between serum and LRT cytokines. Bubbles in red denote a positive correlation; bubbles in blue represent a negative correlation. Data is represented by normalized log10 counts. *, P<0.05. LRT, lower respiratory tract; IL, interleukin; IFN, interferon; CCL, chemokines; PL, protein level; L, level.
Figure S4 Comparison of levels of serum and respiratory inflammatory mediators among case 1, case 2, case 3, case 4, and healthy controls. The criteria for identifying active and non-active SARS-CoV-2 phase are consistent with Figure 4. Both serum protein (A) or respiratory mRNA levels (B) of inflammatory mediators in 4 cases were divided into the SARS-CoV-2 non-active phase (red square) and the SARS-CoV-2 active phase (blue triangle). Green circle represents health controls. IL, interleukin; TNF-α, tumor necrosis factor-α; IFN, interferon; IP-10, IFN-γ-induced protein 10; CCL, chemokines; URT, upper respiratory tract; LRT, lower respiratory tract; RPM, reads per million.