## **Supplementary Method**

## **Supplementary Method 1: Discharge criteria of COVID-19 patients**

Based on the New Coronavirus Diagnosis and Treatment Guidelines in China, patients were discharged if they fulfilled all three conditions:

- (i) At least two consecutive results of undetectable SARS-CoV-2 in throat swab samples which were collected at least 24 hours apart;
- (ii) Clinical remission of respiratory symptoms and fever for at least three consecutive days;
- (iii) Substantial improvement of both lungs based on computed tomography.

All discharged patients remained on home isolation for another 14 days.