## **Description of Additional Supplementary Files**

**File name:** Supplementary Data 1.

**Description:** Throat and gut microbial abundances (phyla and genera). The 16S-rRNA gene sequences of all samples used in this study.

**File name:** Supplementary Data 2.

**Description:** Clinical index of COVID-19 patients in this study. Demographic and clinical

characteristics of these patients.

**File name:** Supplementary Data 3.

**Description:** Dynamic changes of clinical parameters of 13 COVID-19 patients. The clinical

index during the course of disease.

**File name:** Supplementary Data 4.

**Description:** The original raw source data needed to create figure files.

File name: Supplementary Code.

**Description:** The analyses scripts/code of the correlation analysis R package.