

**File Name: Supplementary Data 1**

**Description:** Pillar 1 genome metadata

**File Name: Supplementary Data 2**

**Description:** Pillar 2 genome metadata

**File Name: Supplementary Data 3**

**Description:** Periscope canonical sgRNA counts for Pillar 1 samples

**File Name: Supplementary Data 4**

**Description:** Periscope canonical sgRNA counts for Pillar 2 samples

**File Name: Supplementary Data 5**

**Description:** LC-MS/MS protein abundance data

**File Name: Supplementary Data 6**

**Description:** Pillar 1 sample days since symptom onset

**File Name: Supplementary Data 7**

**Description:** Periscope noncanonical sgRNA counts for Pillar 1 samples. Note: some samples do not have any predicted noncanonical sgRNA and so will not appear in this file.

**File Name: Supplementary Data 8**

**Description:** ARTIC Network SARS-CoV-2 V3 primer sequences

**File Name: Supplementary Data 9**

**Description:** R code to recreate figures and analyses