Supplementary Figure S1. The alignment plots of longitudinal severity sequences (NEWS) of the COVID-19 patients to the predefined reference sequences (Rm and Rs) using SynchDP. Each panel displays the NEWS trajectory of a single patient, the aligned region selected by SynchDP, and the mapped omics sampling points. This figure extends the representative examples shown in Figure 3(b), illustrating the overall synchronization results of the cohort to a common reference timeline.