



**Supplementary Figure 3. Heatmap of the modified Marshall scores on day 0, 2, 3, ..., 20 and the dendrogram of the hierarchical clustering.** Hierarchical clustering was performed on the modified Marshall score trajectories, where missing scores were imputed using k-nearest neighbor. The left plot is the dendrogram of the hierarchical clustering from which we obtained five subgroups: *ocMOF i* to *v*. Patients from *ocMOF i* to *iii* tend to have low modified Marshall scores, with patients with *ocMOF i* recovering to 0 first, followed by *ocMOF ii* and *iii*, while patients from *ocMOF iv* and *v* tend to have high modified Marshall scores throughout the first 20 days.