



**Figure S3: Immune cell infiltration pattern of validation cohorts**

(a-c) Heatmap of unsupervised clustering based on 22 TME immune cells of 275 patients in GSE22153, GSE54467, and GSE65904 show two immune cell infiltration patterns: TMEclusterA (blue) and TMEclusterB (yellow).

The rows of the heatmap show the value of immune cells (z-score) calculated by CIBERSORT.