

**Supplement Figure S1.** Other ICD-associated identified subtypes in high-grade glioma. (A) Heatmap of consensus clustering ( $k = 2 \sim 9$ ) for 33 genes. (B) Delta area curve and tracking plot of consensus clustering in area under the cumulative distribution function (CDF) curve for  $k = 2 \sim 9$ .

**Supplement Figure S2.** The survival of patients with the clinical prognostic characteristics respectively in TCGA and CGGA