**Supplemantary figure legends**

**Figure S1**. Representative immunohistochemistry images. IM: invasive margin; CT: core of tumor. Bar, 100 µm.

**Figure S2**. Receiver operating characteristic (ROC) curves for GC-SVM, clinical stage, clinicopathological characteristics, molecular markers as predictors of 5 years DFS and OS in training and validation cohorts. Left panel: OS; right panel: DFS. The figure showed the top five parameters (with highest AUCs), AUC values and optimal cut-point values. The cut-point of CD34 staining (micro-vessel density, MVD) was the number of micro-vessels per field (×200). The cut-points of immune cells staining in CT and IM were the number of cells per field (×200).

**Figure S3.** Kaplan-Meier survival analysis of DFS for patients in the internal validation cohort according to the GC-SVM classifier stratified by clinicopathological risk factors. *P*-values were calculated by log-rank test.

**Figure S4.** Kaplan-Meier survival analysis of OS for patients in the internal validation cohort according to the GC-SVM classifier stratified by clinicopathological risk factors. *P*-values were calculated by log-rank test.

**Figure S5.** Kaplan-Meier survival analysis of DFS for patients in the external validation cohort according to the GC-SVM classifier stratified by clinicopathological risk factors. *P*-values were calculated by log-rank test.

**Figure S6.** Kaplan-Meier survival analysis of OS for patients in the external validation cohort according to the GC-SVM classifier stratified by clinicopathological risk factors. *P*-values were calculated by log-rank test.