

Figure S1 Heatmap of the DEGs after integrated analysis in GSE32665, and GSE32863 datasets shows that the 296 DEGs can effectively distinguish tumors from non-tumor tissues. DEGs, differentially-expressed genes.

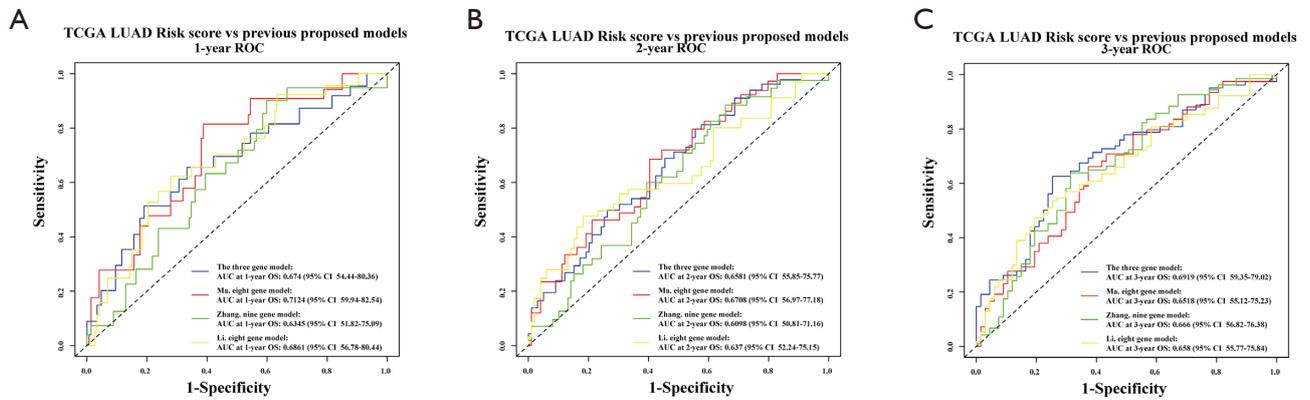


Figure S2 ROC curves of the (A) 1-, (B) 2-, and (C) 3-year OS predictions of the gene signature compared with previous risk models. TCGA, The Cancer Genome Atlas; LUAD, lung adenocarcinoma; ROC, receiver operating characteristic; AUC, area under the ROC curve; OS, overall survival; CI, confidence interval.

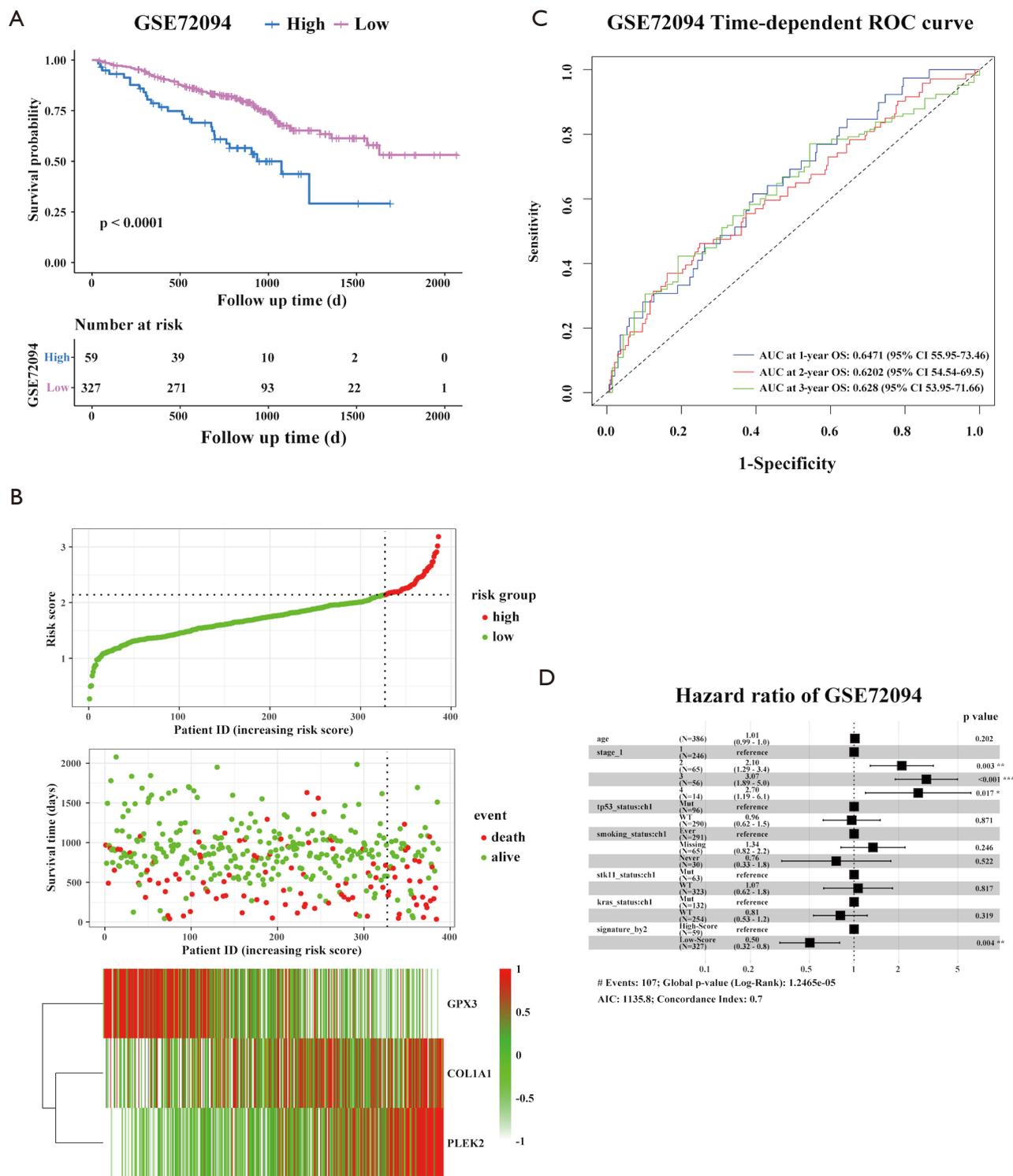


Figure S3 External validation of the prognostic gene signature in the GSE72094 dataset. (A) KM survival curves of the gene signature. (B) Distribution of the risk score, survival status of patients, and the mRNA expression heatmap. (C) ROC curves of the 1-, 2-, and 3-year OS predictions of the gene signature. (D) The prognostic value of gene signature was evaluated using a multivariate Cox model. *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$. ROC, receiver operating characteristic; AUC, area under the ROC curve; OS, overall survival; CI, confidence interval; AIC, Akaike information criterion; KM, Kaplan-Meier; mRNA, messenger RNA.

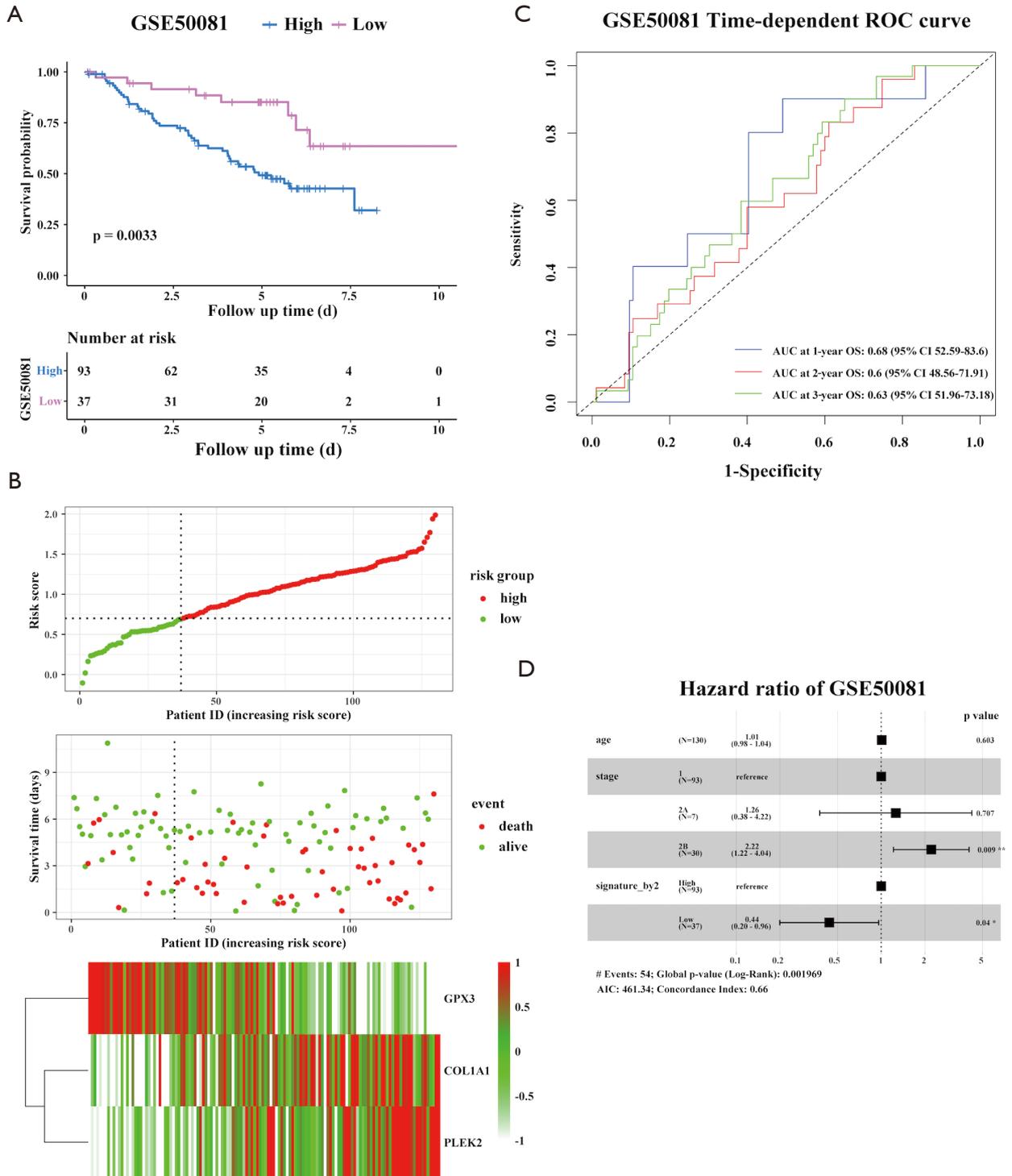


Figure S4 External validation of the prognostic gene signature in the GSE50081 dataset. (A) KM survival curves of the gene signature. (B) Distribution of the risk score, survival status of patients, and the mRNA expression heatmap. (C) ROC curves of the 1-, 2-, and 3-year OS predictions of the gene signature. (D) The prognostic value of gene signature was evaluated using a multivariate Cox model. *, $P < 0.05$; **, $P < 0.01$. ROC, receiver operating characteristic; AUC, area under the ROC curve; OS, overall survival; CI, confidence interval; AIC, Akaike information criterion; KM, Kaplan-Meier; mRNA, messenger RNA.

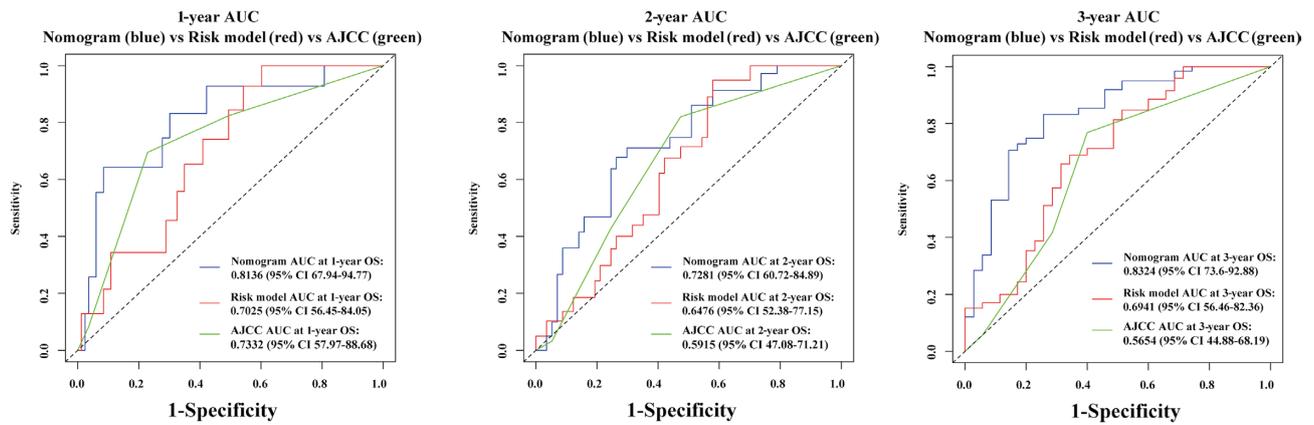


Figure S5 ROC curves of the 1-, 2-, and 3-year OS predictions of the nomogram compared with the gene signature and AJCC staging. AUC, area under the ROC curve; ROC, receiver operating characteristic; AJCC, American Joint Committee for Cancer; OS, overall survival; CI, confidence interval.