Table S1 The C-index of each model

Model	TCGA	GSE14520	GSE76427
LASSO + RSF	0.923991446	0.642764782	0.596504006
LASSO + GBM	0.864801189	0.628541201	0.607428988
StepCox[both] + GBM	0.855993331	0.645585988	0.579024035
StepCox[backward] + GBM	0.855993331	0.645585988	0.579024035
RSF + survival-SVM	0.687882852	0.640648877	0.579752367
StepCox[both] + RSF	0.933089275	0.646173739	0.569555717
GBM	0.834390518	0.659280592	0.556445739
RSF + SuperPC	0.692449889	0.634653815	0.579752367
RSF + Enet[a=0]	0.703468774	0.637886446	0.5600874
RSF + Enet[a=0.1]	0.704447425	0.633595862	0.557174071
Enet[a=0.5]	0.743230998	0.641589279	0.547705754
Enet[a=0.9]	0.745659502	0.638180322	0.550619082
Enet[a=0.8]	0.744825836	0.638532973	0.54989075
Enet[a=0.7]	0.74439088	0.639826026	0.548434086
Enet[a=0.6]	0.743738446	0.641177854	0.546977422
RSF + Enet[a=0.2]	0.705208598	0.632714235	0.554989075
StepCox[both] + survival-SVM	0.681394759	0.63735747	0.54989075
StepCox[backward] + survival-SVM	0.681394759	0.63735747	0.54989075
Enet[a=1]	0.74587698	0.637475021	0.549162418
Enet[a=0.4]	0.742361086	0.64170683	0.544792425
Enet[a=0.3]	0.740766247	0.641060303	0.543335761
RSF + GBM	0.824893979	0.634418714	0.549162418
RSF + Enet[a=0.3]	0.705462322	0.631832608	0.549162418
LASSO + SuperPC	0.696183261	0.645527213	0.535324108
RSF	0.937946283	0.638062772	0.539694101
Enet[a=0.2]	0.740983725	0.640119901	0.537509104
RSF + Enet[a=0.4]	0.705498568	0.631656283	0.544792425
LASSO + StepCox[forward]	0.757222081	0.621311861	0.554260743
RSF + Enet[a=0.6]	0.7056798	0.631244857	0.544064093
RSF + plsRcox	0.705244844	0.629011402	0.54624909
RSF + Enet[a=0.5]	0.705353583	0.631186082	0.544064093
LASSO + plsRcox	0.757294574	0.621605736	0.553532411
StepCox[backward] + RSF	0.931204466	0.642412131	0.532410779
RSF + Enet[a=0.8]	0.706259741	0.631362407	0.541879097
RSF + Enet[a=0.9]	0.706259741	0.631303632	0.541879097
RSF + Enet[a=1]	0.706151002	0.631068532	0.541879097
RSF + Enet[a=0.7]	0.706187249	0.631186082	0.541150765
survival-SVM	0.681829715	0.645468438	0.520757465
Enet[a=0.1]	0.739316394	0.636534619	0.52585579
RSF + StepCox[forward]	0.705498568	0.620606559	0.541150765
LASSO + survival-SVM	0.72325927	0.645350888	0.506919155
Enet[a=0]	0.730436043	0.637710121	0.513474144
RSF + StepCox[both]	0.704157454	0.610967439	0.528769119
RSF + StepCox[backward]	0.704157454	0.610967439	0.528769119
SuperPC	0.68632426	0.615022922	0.517115805
StepCox[both] + SuperPC	0.692812353	0.613671094	0.505462491
StepCox[backward] + SuperPC	0.692812353	0.613671094	0.505462491
LASSO + StepCox[both]	0.755699735	0.612436817	0.457392571
LASSO + StepCox[backward]	0.755699735	0.612436817	0.457392571
StepCox[both] + Enet[a=0]	0.795099496	0.535911602	0.464675892
StepCox[backward] + Enet[a=0]	0.795099496	0.535911602	0.464675892
StepCox[both] + plsRcox	0.793504658	0.518984366	0.479970867
StepCox[backward] + plsRcox	0.793504658	0.518984366	0.479970867
StepCox[both] + Enet[a=0.4]	0.796513103	0.530210415	0.468317553
StepCox[backward] + Enet[a=0.4]	0.796513103	0.530210415	0.468317553
StepCox[both] + Enet[a=0.1]	0.796585596	0.531150817	0.466860889
StepCox[backward] + Enet[a=0.1]	0.796585596	0.531150817	0.466860889
StepCox[both] + Enet[a=0.3]	0.796513103	0.530210415	0.467589221
StepCox[backward] + Enet[a=0.3]	0.796513103	0.530210415	0.467589221
StepCox[both] + Enet[a=0.2]	0.796621842	0.530327965	0.465404224
StepCox[backward] + Enet[a=0.2]	0.796621842	0.530327965	0.465404224
StepCox[both] + Enet[a=0.5]	0.796223132	0.529563889	0.466132556
StepCox[backward] + Enet[a=0.5]	0.796223132	0.529563889	0.466132556
StepCox[both] + Enet[a=0.6]	0.79615064	0.528035735	0.464675892
StepCox[backward] + Enet[a=0.6]	0.79615064	0.528035735	0.464675892
StepCox[both] + Enet[a=0.7]	0.795969408	0.527624309	0.46394756
StepCox[backward] + Enet[a=0.7]	0.795969408	0.527624309	0.46394756
StepCox[both] + Enet[a=0.9]	0.795643191	0.526683907	0.464675892
StepCox[backward] + Enet[a=0.9]	0.795643191	0.526683907	0.464675892
StepCox[both] + Enet[a=0.8]	0.796041901	0.526977783	0.46394756
StepCox[backward] + Enet[a=0.8]	0.796041901	0.526977783	0.46394756
StepCox[both] + Enet[a=1]	0.795788176	0.526096156	0.46394756
StepCox[backward] + Enet[a=1]	0.795788176	0.526096156	0.46394756
StepCox[both]	0.797274276	0.516574586	0.471230881
StepCox[backward]	0.797274276	0.516574586	0.471230881
plsRcox	0.808800609	0.520277419	0.466860889
StepCox[forward]	0.823190402	0.512930528	0.458120903

TCGA, The Cancer Genome Atlas; LASSO, least absolute shrinkage and selection operator; RSF, random survival forest; GBM, gradient boosting machine; SVM, support vector machine.
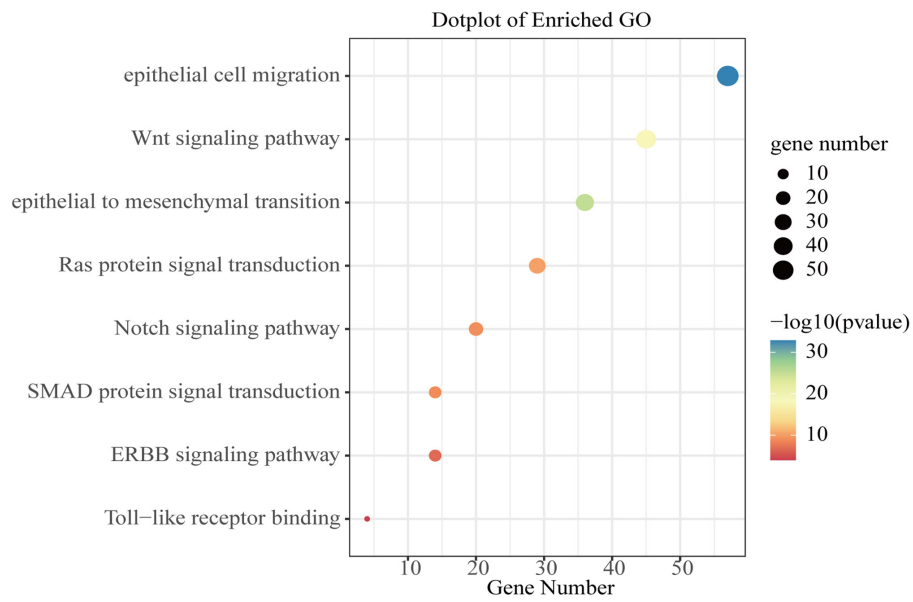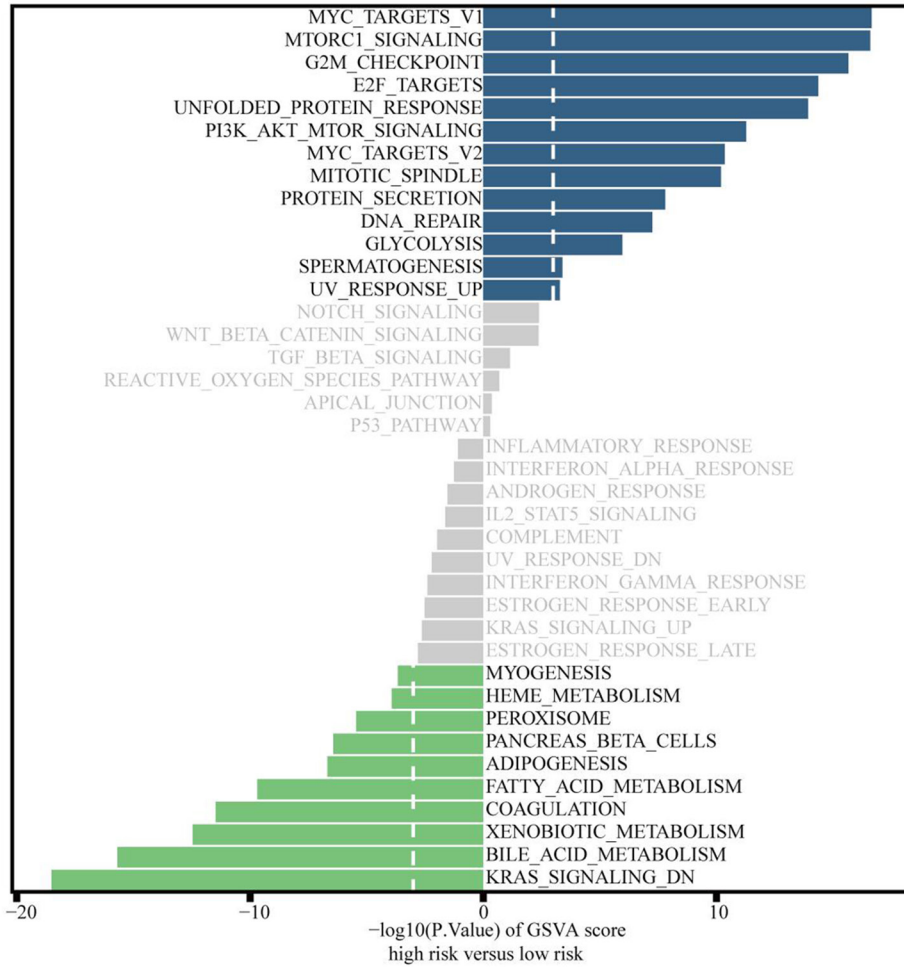
Figure S1 GO analysis of the DE-ERGs. GO, Gene Ontology; DE-ERGs, differentially expressed EMT-related genes; EMT, epithelial-mesenchymal transition.
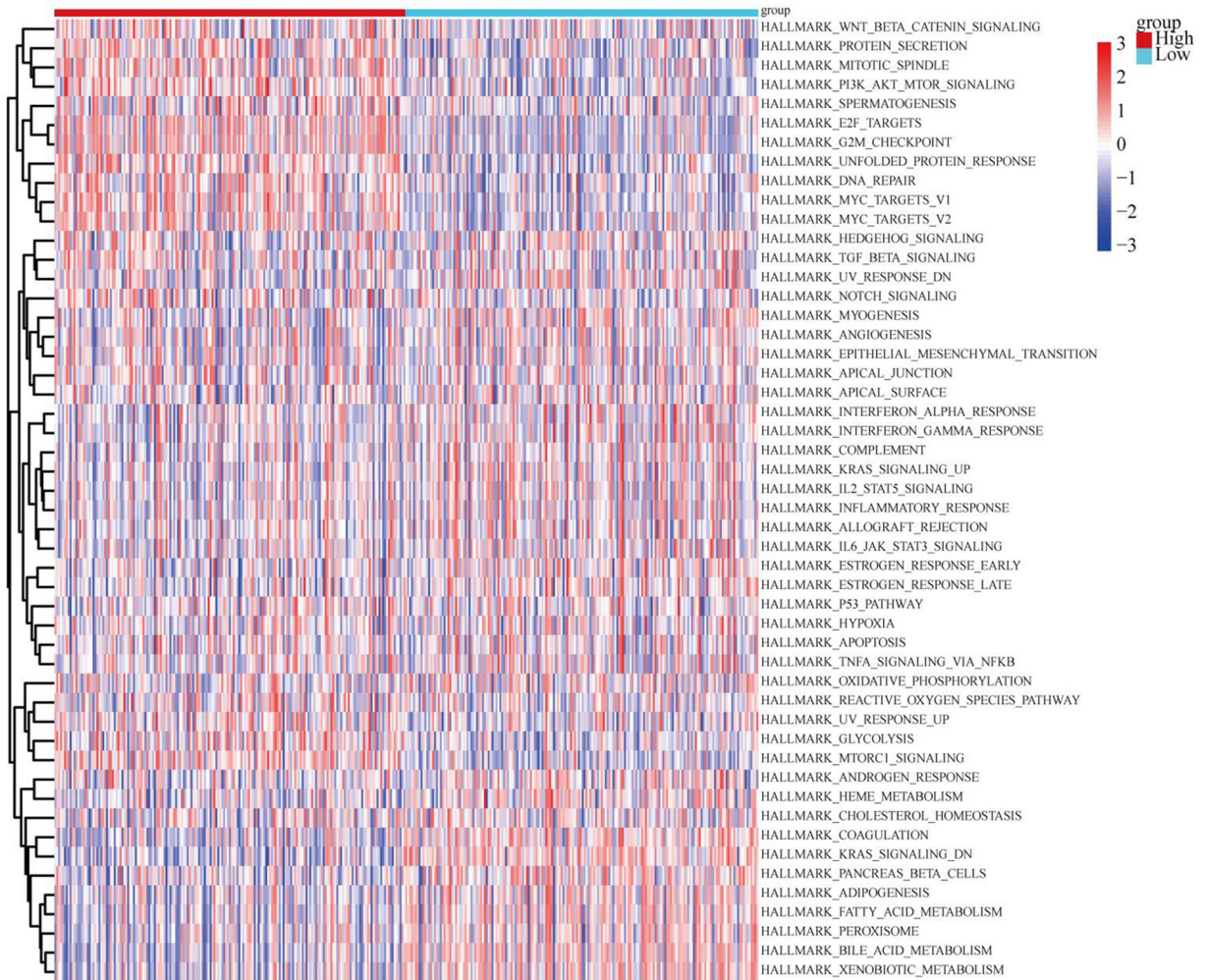
Figure S2 GSVA analysis of all genes in the high- and low-risk groups (A) to obtain enriched pathways (B). GSVA, gene set variation analysis.