

SUPPLEMENTARY TABLES

Supplementary Table 1. The clinical characteristics in TCGA [n (%)].

Variables	TCGA cohort (N=415)	GEO cohort (N=519)
Age		
<65	157(37.8)	192(37.0)
≥65	258(62.2)	327(63.0)
Gender		
male	221(53.3)	233(44.9)
female	194(46.8)	286(55.1)
Race		
White	192(46.3)	
Others	223(53.7)	
Tumor invasion		
T1	9(2.2)	11(2.1)
T2	72(17.4)	43(8.3)
T3	285(68.7)	337(64.9)
T4	49(11.8)	105(20.2)
Unknown		23(4.4)
Metastasis		
M0	317(76.4)	468(90.2)
M1	60(14.5)	30(5.8)
Unknown	38(9.2)	21(4.0)
Lymph node		
N0	245(59.0)	281(54.1)
N1	98(23.6)	124(23.9)
N2	72(17.4)	85(16.4)
N3		5(1.0)
Unknown		24(4.6)
Pathological stage		
Stage I	73(17.6)	36(6.9)
Stage II	164(39.5)	253(48.7)
Stage III	118(28.4)	200(38.6)
Stage IV	60(14.5)	30(5.8)
Tumor location		
Left	125(30.1)	310(59.7)
Right	186(44.8)	209(40.3)
Unknown	104(25.1)	
Histological classification		
Adenocarcinoma	351(84.6)	
Others	64(15.4)	

Supplementary Table 2. Numbers of mutations and numbers of patients with mutations in high- and low-risk groups.

Pathway	No. of mutations		No. of patients with mutations(%)		<i>P</i>
	high-risk	low-risk	high-risk	low-risk	
RTK-RAS	81	78	151(85.3%)	135(75.4%)	0.019
WNT	64	61	164(92.7%)	161(89.9%)	0.364
NOTCH	62	61	103(58.2%)	81(45.3%)	0.015
Hippo	37	31	104(58.8%)	96(53.6%)	0.330
PI3K	28	23	96(54.2%)	90(50.3%)	0.455
MYC	13	10	39(22%)	18(10.1%)	0.002
Cell-Cycle	10	6	30(16.9%)	8(4.5%)	<0.001
TGF-Beta	7	7	70(39.5%)	46(25.7%)	0.005
TP53	6	6	115(65%)	113(63.1%)	0.717
NRF2	3	2	13(7.3%)	6(3.4%)	0.094