

SUPPLEMENTARY TABLES

Supplementary Table 2. Comparison of baseline clinicopathological characteristics based on TCGA.

	TCGA Cohort(N= 533)			P
	Cases No.	TIP-B1		
		Low	High	
Age (years)				
≤60	264	161	103	0.795
>60	269	167	102	
Gender				
Male	345	198	147	0.008
Female	188	130	58	
Laterality				
Left	251	147	104	0.172
Right	281	181	100	
Bilateral	1	0	1	
Pathologic stage				
Stage i-ii	324	238	86	<0.0001
Stage iii-iv	207	90	117	
NA	2			
Pathology T stage				
T1-2	342	245	97	<0.0001
T3-4	191	83	108	
Pathology N stage				
N(-)	240	146	94	0.007
N(+)	16	4	12	
NA	277			
Pathology M stage				
M(-)	422	277	145	<0.0001
M(+)	79	29	50	
NA	32			
Grade				
G1-2	242	183	59	<0.0001
G3-4	282	137	145	
NA	1			
Cancer Status				
Recurrence(-)	356	253	103	<0.0001
Recurrence(+)	161	63	98	
NA	16			

Supplementary Table 3. Univariate and multivariate Cox proportional hazards analysis of OS from TCGA cohort.

Variables	OS			
	Univariate analysis	<i>P</i>	Multivariate analysis	<i>P</i>
	HR (95%CI)		HR (95%CI)	
Age (years)				
≤60	1.000	<0.204	NA	
>60	1.213(0.900-1.634)			
TIP-B1				
High	1.000	<0.0001	1.000	0.015
Low	0.408(0.302-0.551)		0.669(0.483-0.926)	
Gender				
Male	1.000	0.737	NA	
Female	1.054(0.775-1.434)			
Pathologic stage				
Stage i-ii	1.000	<0.0001	1.000	0.224
Stage iii-iv	3.727(2.750-5.050)		1.546(0.766-3.117)	
Pathology T stage				
T1-2	1.000	<0.0001	1.000	0.853
T3-4	3.138(2.320-4.245)		1.059(0.580-1.933)	
Pathology N stage				
N(-)	1.000	<0.0001	1.000	0.417
N(+)	3.492(1.857-6.565)		1.312(0.682-2.524)	
NA	0.829(0.610-1.126)			
Pathology M stage				
M(-)	1.000	<0.0001	1.000	0.016
M(+)	4.464(3.269-6.095)		1.612 (1.092-2.382)	
NA	0.913(0.289-2.889)			
Grade				
G1-2	1.000	<0.0001	1.000	0.038
G3-4	2.632(1.874-3.696)		1.481(1.021-2.147)	
NA	0.750(0.100-5.260)			
Cancer_Status				
Recurrence(-)	1.000	<0.0001	1.000	<0.0001
Recurrence(+)	4.856(3.528-6.682)		2.763(1.907-4.003)	
NA	3.177(1.367-7.384)			

Supplementary Table 4. Sequence of primers for real-time polymerase chain reaction primer.

Primer	Sequence (5' to 3')
ZO-1-F	TGCCATTACACGGTCCTCTG
ZO-1-R	GGTTCTGCCTCATCATTTCCTC
E-Cadherin-F	GTAGGAAGGCACAGCCTGTC
E-Cadherin-R	CAGCAAGAGCAGCAGAATCA
N-Cadherin-F	GAGCATGCCAAGTTCCTGAT
N-Cadherin-R	TGGCCACTGTGCTTACTGAA
Vimentin-F	CTGCAGGACTCGGTGGACTT
Vimentin-R	GAAGCGGTCATTCAGCTCCT
Twist-F	GAGTCCGCAGTCTTACGAGG
Twist-R	CTGCCCGTCTGGGAATCACT
Snail-F	ACCACTATGCCGCGCTCTT
Snail-R	GGTCGTAGGGCTGCTGGAA
Slug-F	TGTTGCAGTGAGGGCAAGAA
Slug-R	GACCCTGGTTGCTTCAAGGA
GAPDH-F	ACGGATTTGGTCGTATTGGG
GAPDH-R	TGATTTTGGAGGGATCTCGC

Supplementary Table 5. List of antibodies and reagents used for studies.

Name	Supplier	Catalog
TIP-B1	Sigma-Aldrich	HPA030848
ZO-1	Abcam	ab96587
E-Cadherin	Abcam	ab40772
N-Cadherin	Abcam	ab18203
Vimentin	Abcam	ab92547
Twist	Abcam	ab49254
Snail	Abcam	ab53519
Slug	Abcam	ab183760
Total Akt (T-Akt)	Cell Signaling Technology	#9272
Phosphorylated Akt (p-Akt)	Cell Signaling Technology	#4051
Total ERK(T-ERK)	Cell Signaling Technology	#9102
Phosphorylated ERK(p-ERK)	Cell Signaling Technology	#9101
Total p38(T-p38)	Cell Signaling Technology	#9212
Phosphorylated p38(p-p38),	Cell Signaling Technology	#4511
EGFR	Cell Signaling Technology	#2232
Phosphorylated EGFR(p-EGFR, at Y992,Y1045,Y1068)	Cell Signaling Technology	#2235/#2237/#2234
GAPDH	Abcam	ab9484
MK-2206	Selleck	S1078
SC79	Selleck	S7863
AG-1478	Selleck	S2728
EGF	Sigma-Aldrich	E9644