

Supplementary table 1. Correlation coefficients between each ERBB ligands expressions in TCGA data.

	HBEGF	AREG	EREG	BTC	EGF
TGFA	0.216(0.001)	0.324 (<0.001)	0.216 (<0.001)	0.047 (0.345)	0.037 (0.456)
HBEGF		0.460 (<0.001)	0.282 (0.005)	0.112 (0.024)	0.041 (0.409)
AREG			0.611 (<0.001)	0.072 (0.145)	0.102 (0.040)
EREG				0.076 (0.125)	0.206 (<0.001)
BTC					0.032 (0.524)

The parenthesized value is p-value.

Supplementary table 2. Correlation coefficients between each ERBB ligands expressions in ACRG data.

	HBEGF	AREG	EREG	BTC	EGF
TGFA	0.148 (0.010)	0.296 (<0.001)	0.173 (0.003)	0.054 (0.348)	0.033 (0.572)
HBEGF		0.385 (<0.001)	0.213 (<0.001)	-0.014 (0.806)	-0.004 (0.950)
AREG			0.590 (<0.001)	0.108 (0.061)	-0.019 (0.749)
EREG				-0.119 (0.040)	0.001 (0.983)
BTC					-0.106 (0.067)

The parenthesized value is p-value.

Supplementary table 3. Cox proportional analysis results of univariate and multivariate in overall survival and stage II/III patients

	Multivariate			
	All parameters	<i>p</i>	Model selection	<i>p</i>
TNM(II vs. III)	4.528 (2.485-8.249)	<0.001	4.758 (2.617-8.649)	<0.001
Sex (Male vs. female)	1.425 (0.841-2.413)	0.188	1.521 (0.921-2.511)	0.101
Age (<60 vs. ≥60)	1.773 (1.096-2.870)	0.020	1.663 (1.049-2.638)	0.031
Lauren's classification (intestinal vs. non-intestinal)	1.256 (0.755-2.092)	0.380		
EBV (negative vs. positive)	2.056 (0.815-5.183)	0.127	2.229 (0.922-5.387)	0.075
MSI (non-MSI vs. MSI)	0.301 (0.101-0.896)	0.031	0.339 (0.119-0.969)	0.044
EGFR	0.969 (0.439-2.136)	0.937		
ERBB2	0.981 (0.413-2.331)	0.966		
ERBB3	0.422 (0.125-1.430)	0.166	0.441 (0.134-1.451)	0.178
TGFA	0.601 (0.297-1.216)	0.157	0.544 (0.282-1.047)	0.069
HBEGF	1.627 (0.804-3.294)	0.176	1.766 (0.916-3.408)	0.090
AREG	1.732 (1.010-2.969)	0.046	1.841 (1.160-2.923)	0.010
EREG	1.105 (0.604-2.022)	0.746		
BTC	1.337 (0.655-2.730)	0.425		
EGF	1.273 (0.521-3.109)	0.597		
All parameters		<0.001		<0.001

Supplementary table 4. Cox proportional analysis results of univariate and multivariate in overall survival and EGFR-positive patients

	Multivariate			
	All parameters	<i>p</i>	Model selection	<i>p</i>
TNM (I/II vs. III/IV)	57.19 (3.284-995.958)	0.006	62.73 (5.627-699.280)	0.001
Sex (Male vs. female)	0.913 (0.053-15.817)	0.950		
Age (<60 vs. ≥60)	1.058 (0.063-17.80)	0.969		
Lauren's classification (intestinal vs. non-intestinal)	6.663 (0.410-108.363)	0.183	4.689 (1.126-19.54)	0.034
EBV (negative vs. positive)	1.712 (0.004-820.198)	0.864		
MSI (non-MSI vs. MSI)	0.687 (0.023-20.405)	0.828		
ERBB2	5.845 (0.060-572.924)	0.450	7.540 (1.508-37.70)	0.014
ERBB3	<0.001 (0 – infinity)	0.998	<0.001 (0 – infinity)	0.998
TGFA	0.533 (0.044-6.493)	0.622		
HBEGF	0.957 (0.070-13.101)	0.974		
AREG	6.967 (0.192-253.038)	0.290	6.163 (0.666-57.01)	0.109
EREG	4.655 (0.294-73.836)	0.275	5.790 (1.361-24.63)	0.017
BTC	3.584 (0.136-94.424)	0.444		
EGF	1.128 (0.073-17.404)	0.931		
All parameters		<0.001		<0.001