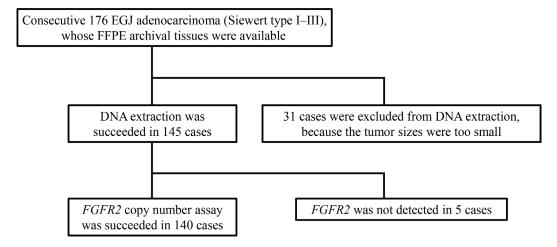
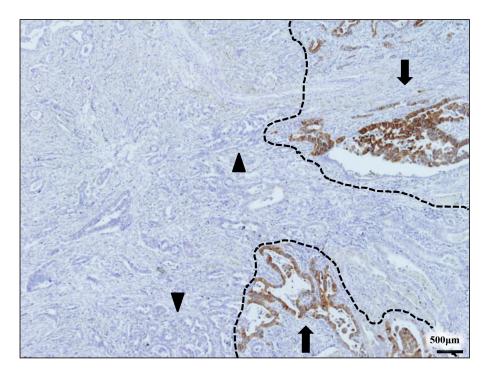
## Fibroblast growth factor receptor 2 expression, but not its genetic amplification, is associated with tumor growth and worse survival in esophagogastric junction adenocarcinoma

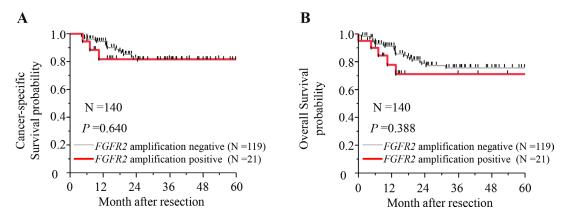
**Supplementary Materials** 



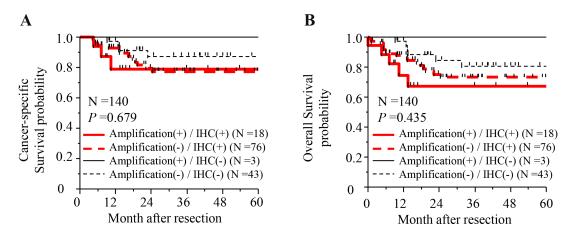
Supplementary Figure S1: Flow chart showing the inclusion/exclusion criteria for copy number assay and immunohistochemical staining.



**Supplementary Figure S2: Heterogeneous FGFR2 expression in EGJ adenocarcinoma.** The tumor cells area surrounded by dotted lines are negative for FGFR2 expression. The arrows show FGFR2 positive cancer cells. The arrowheads show FGFR2 negative cancer cells.



Supplementary Figure S3: Patient outcomes in cases of positive (red) and negative (gray) FGFR2 amplification (N = 140). (A) cancer-specific survival; (B) overall survival.



Supplementary Figure S4: Patient outcomes according to combinations of FGFR2 amplification and FGFR2 IHC status (N=140). (A) cancer-specific survival; (B) overall survival.

## Supplementary Table S1: Primer sequences used in qRT-PCR of mRNA

Gene	Primer sequence			
FGFR2	F 5'-GGACCCAAAATGGGAGTTTC-3'			
T OT K2	R 5'-ACCACTTGCCCAAAGCAA-3'			
HPRT-1	F 5'-TGACCTTGATTTATTTTGCATACC-3'			
HFK1-1	R 5'-CGAGCAAGACGTTCAGTCCT-3'			

## Supplementary Table S2: Univariate and multivariate logistic analysis of FGFR2 amplification status in EGJ adenocarcinoma patients with tumor resection

Essan		FGFR2	Univariate analysis			Multivariate analysis		
Factors		amplification positive status (%)	OR	95% CI	P value	OR	95% CI	P value
Age	≥ 70/< 70	9 (14%)/12 (16%)	0.82	0.31-2.07	0.669	0.71	0.25-1.95	0.511
Sex	Male/female	17 (15%)/4 (15%)	1.02	0.34-3.79	0.976	1.21	0.31-3.93	0.760
Siewert classification	I–II/III	13 (15%)/8 (15%)	1.01	0.37-2.59	0.981	1.02	0.38-2.85	0.971
Tumor depth	T2-T4/T1	15 (15%)/6 (14%)	1.13	0.42-3.37	0.816	1.08	0.31-3.94	0.903
Lymph node metastasis	Positive/ negative	12 (18%)/9 (12%)	1.66	0.65-4.35	0.286	1.90	0.63-6.13	0.256
Distant metastasis	Positive/ negative	2 (15%)/19 (15%)	1.03	0.15-4.26	0.968	1.04	0.22-7.58	0.961
Histopathological type	Poorly/well- moderate	4 (9%)/17 (18%)	0.48	0.13-1.41	0.192	0.38	0.10-1.21	0.104

In multiple-hypothesis testing, the significant P-value was adjusted to P = 0.05/14 = 0.004. Thus, a P value between 0.05 and 0.004 should be regarded as borderline significant.

CI, confidence interval; EGJ, esophagogastric junction; FGFR2, fibroblast growth factor receptor 2; OR, odds ratio N = 176.