

**S1 Table.** Univariable analysis for disease-free survival and overall survival (cohort 1)

Characteristics	No.	Disease-free survival			Overall survival		
		Hazard ratio	95% Confidence interval	p-value <sup>a)</sup>	Hazard ratio	95% Confidence interval	p-value <sup>a)</sup>
Sex							
Male	291	1			1		
Female	68	0.6	0.4-0.9	0.011	0.6	0.4-1.0	0.037
MSI							
MSS or MSI-L	318	1			1		
MSI-H	41	0.5	0.2-1.1	0.077	0.5	0.2-1.1	0.098
Age (yr)							
< 70	236	1			1		
≥ 70	123	1.4	0.9-2.2	0.193	1.4	0.8-2.2	0.210
Histology							
Poorly cohesive, signet ring cell type	42	1			1		
Other	317	1.3	0.8-2.0	0.255	1.3	0.8-2.1	0.289
Lauren							
Diffuse	137	1			1		
Intestinal	175	0.7	0.5-1.1	0.103	0.6	0.4-1.0	0.047
Mixed	44	1.2	0.7-2.1	0.480	1.1	0.6-2.0	0.772
Location							
Upper third	21	1			1		
Mid third	183	1.3	0.5-3.2	0.604	3.1	0.8-12.9	0.112
Lower third	155	1.5	0.6-3.7	0.418	3.6	0.9-14.8	0.077
Stage							
Ib	76	1			1		
II	145	2.7	1.0-7.1	0.043	4.2	1.3-14.1	0.019
III	138	13.2	5.3-32.6	< 0.001	20.4	6.4-64.9	< 0.001
Lymphatic							
Absent	137	1			1		
Present	222	3.5	2.1-5.8	< 0.001	3.5	2.0-5.9	< 0.001
Venous							
Absent	308	1			1		
Present	51	3.8	2.5-5.7	< 0.001	3.8	2.4-5.8	< 0.001
Perineural							
Absent	161	1			1		
Present	198	2.4	1.6-3.6	< 0.001	2.5	1.6-3.9	< 0.001
Adjuvant chemotherapy							
Not applied	183	1			1		
Applied	176	1.5	1.0-2.2	0.043	1.6	1.0-2.3	0.033

MSI, microsatellite instability; MSS, microsatellite stable; MSI-L, MSI-low; MSI-H, MSI-high.

<sup>a)</sup>The Cox proportional hazards regression model was used.