

## Supplementary

**Table S1** Univariate and multivariate Cox proportional hazards regression analyses for OS in patients with ≤15 examined LNs

Factors	Univariate analysis	Multivariate analysis <sup>‡</sup>		Multivariate analysis <sup>§</sup>		Multivariate analysis <sup>¶</sup>	
	P	HR (95% CI)	P	HR (95% CI)	P	HR (95% CI)	P
Age	0.213						
Race							
White		Reference		Reference		Reference	
Black	0.736	1.028 (0.689-1.533)	0.893	1.059 (0.710-1.578)	0.779	1.019 (0.685-1.517)	0.925
Others†/NOS	0.031*	0.689 (0.450-1.056)	0.088	0.661 (0.431-1.012)	0.057	0.660 (0.431-1.011)	0.056
Gender							
Male							
Female	0.875						
Insurance							
Yes							
No/unknown	0.833						
Marital status							
Married		Reference		Reference		Reference	
Single	0.020*	1.207 (0.864-1.686)	0.269	1.189 (0.853-1.657)	0.306	1.171 (0.841-1.629)	0.350
Separated/divorced/widowed	0.360	1.002 (0.474-2.117)	0.996	0.943 (0.446-1.993)	0.878	0.958 (0.453-2.027)	0.911
NOS	0.272	1.105 (0.267-4.568)	0.890	0.986 (0.239-4.070)	0.985	0.985 (0.239-4.061)	0.983
Tumor subsites							
Cardia							
Middle	0.319						
Distal	0.632						
Overlapping/NOS	0.060						
Differentiation							
Well differentiated							
Moderately differentiated	0.880						
Poorly differentiated	0.871						
Undifferentiated	0.872						
Unknown	0.873						
Histological type							
Diffuse							
Intestinal	0.248						
Other	0.208						

**Table S1** (*continued*)

**Table S1 (continued)**

Factors	Univariate analysis		Multivariate analysis <sup>‡</sup>		Multivariate analysis <sup>§</sup>		Multivariate analysis <sup>¶</sup>	
	P	HR (95% CI)	P	HR (95% CI)	P	HR (95% CI)	P	
<b>Tumor size</b>								
<1 cm		Reference		Reference		Reference		
1-2 cm	0.248	0.875 (0.172-4.458)	0.872	1.095 (0.221-5.436)	0.911	1.088 (0.219-5.397)	0.918	
2-3 cm	0.112	0.518 (0.102-2.621)	0.427	0.616 (0.126-3.023)	0.551	0.620 (0.126-3.036)	0.555	
3-4 cm	0.012*	0.534 (0.108-2.641)	0.442	0.621 (0.129-2.975)	0.551	0.625 (0.131-2.992)	0.556	
4-5 cm	0.004*	0.627 (0.125-3.138)	0.570	0.702 (0.144-3.414)	0.661	0.692 (0.142-3.368)	0.648	
≥5 cm	0.001*	0.958 (0.203-4.518)	0.956	1.117 (0.245-5.099)	0.887	1.113 (0.244-5.082)	0.890	
NOS	0.004*	0.822 (0.171-3.960)	0.807	0.929 (0.198-4.360)	0.926	0.931 (0.199-4.363)	0.928	
<b>T stage</b>								
T1		Reference		Reference		Reference		
T2	<0.001*	15.734 (4.902-50.505)	<0.001*	17.395 (5.502-55.002)	<0.001*	17.369 (5.500-54.851)	<0.001*	
T3	<0.001*	21.727 (6.506-72.561)	<0.001*	25.425 (7.735-83.569)	<0.001*	24.938 (7.588-81.953)	<0.001*	
T4	<0.001*	29.855 (9.074-98.231)	<0.001*	35.322 (10.919-114.263)	<0.001*	34.710 (10.731-112.273)	<0.001*	
TX	<0.001*	56.596 (8.666-369.611)	0.001*	64.547 (9.979-417.502)	<0.001*	62.456 (9.639-404.673)	<0.001*	
<b>AJCC N factor</b>								
N0		Reference		Not applicable		Not applicable		
N1-3	<0.001*	1.690 (1.115-2.562)	0.013*					
LNR		Not applicable				Not applicable		
L-LNR				Reference				
H-LNR	<0.001*			1.424 (1.019-1.990)	0.038*			
LODDS		Not applicable		Not applicable				
L-LODDS						Reference		
H-LODDS	<0.001*					1.397 (1.002-1.949)	0.049*	
<b>M stage</b>								
M0		Reference		Reference		Reference		
M1	<0.001*	2.936 (2.082-4.141)	<0.001*	2.832 (1.987-4.036)	<0.001*	2.894 (2.039-4.108)	<0.001*	
<b>Chemotherapy</b>								
Yes		Reference		Reference		Reference		
No/unknown	0.002*	1.989 (1.350-2.929)	0.001*	1.940 (1.315-2.863)	0.001*	1.908 (1.294-2.814)	0.001*	
<b>Radiotherapy</b>								
Yes								
No/unknown	0.977							

LNR, lymph node ratio; LODDS, the log odds of positive lymph nodes; NOS, not otherwise specified; HR, hazard ratio; CI, confidence interval; LN, lymph nodes. \*indicate significant P values. <sup>†</sup> Others, American Indian/AK Native, Asian/Pacific Islander. <sup>‡</sup> Adjustment for the following variables: race, tumor subsites, tumor size, T stage, N stage, M stage, and chemotherapy. <sup>§</sup> Adjustment for the following variables: race, tumor subsites, tumor size, T stage, LNR, M stage, and chemotherapy. <sup>¶</sup> Adjustment for the following variables: race, tumor subsites, tumor size, T stage, LODDS, M stage, and chemotherapy.