

Table 3 Univariable and multivariable Cox proportional hazards analysis of risk factors.

Variable	Univariate analysis				Multivariate analysis			
	HR	95%CI		P-value	HR	95%CI		P-value
Age								
< 65 years	Reference				Reference			
≥65 years	1.33	1.19	1.48	<0.001	1.47	1.31	1.64	<0.001
Sex								
Female	Reference				Reference			
Male	1.074	1.002	1.150	0.044	1.26	1.12	1.40	<0.001
Histopathology								
Adenocarcinoma	Reference				Reference			
Mucinous adenocarcinoma	1.60	1.32	1.93	<0.001	1.28	1.06	1.56	0.012
Signet ring cell carcinoma	3.95	2.66	5.87	<0.001	3.08	2.07	4.60	<0.001
pT								
T3	Reference				Reference			
T4a	1.11	0.79	1.56	0.553	0.99	0.65	1.50	0.956
T4b	2.10	1.79	2.47	<0.001	1.52	0.93	2.49	0.097
pN								
N0	Reference				Reference			
N1	0.88	0.50	1.54	0.658	1.04	0.48	2.21	0.929
N1a	1.52	1.30	1.77	<0.001	1.54	0.90	2.64	0.113
N1b	1.85	1.59	2.15	<0.001	1.85	1.08	3.17	0.026
N1c	2.83	2.19	3.66	<0.001	1.97	1.10	3.53	0.022
N2a	2.28	1.91	2.72	<0.001	2.37	2.39	4.04	0.002
N2b	3.86	3.21	4.65	<0.001	3.62	1.94	4.46	<0.001
Scope of regional lymph nodes								
1 to 3 regional LNs	Reference				Reference			
4 or more regional LNs	0.75	0.59	0.96	0.024	0.89	0.68	1.16	0.392
None	0.59	0.40	0.89	0.012	0.68	0.45	1.03	0.072
Chemotherapy								
No/Unknown	Reference				Reference			
Yes	0.54	0.40	0.74	<0.001	0.56	0.41	0.76	<0.001
CEA Pretreatment								
CEA negative/normal	Reference				Reference			
CEA positive/elevated	1.61	1.42	1.83	<0.001	1.38	1.21	1.57	<0.001
Unknow	1.29	1.13	1.48	<0.001	1.18	1.03	1.35	0.02
Harvested lymph nodes								
<12LNs	Reference				Reference			
≥12LNs	0.87	0.78	0.98	0.018	0.97	0.83	1.14	0.709
Harvested lymph nodes								
<14LNs	Reference				Reference			
≥14LNs	0.85	0.77	0.94	0.003	0.79	0.68	0.91	0.002
Tumor deposits								
No	Reference				Reference			
Yes	2.21	1.91	2.56	<0.001	1.36	1.15	1.60	<0.001
Tumor size								
<5cm	Reference				Reference			
≥5cm	1.00	1.00	1.01	<0.001	1.08	0.97	1.2	0.164
Perineural invasion								
No/Unknown	Reference				Reference			
Yes	2.57	2.26	2.91	<0.001	2.06	1.81	2.36	<0.001
Marital status								
Married	Reference				Reference			
Unknow	1.13	0.85	1.51	0.402	1.15	0.86	1.54	0.338
Unmarried	1.29	1.16	1.44	<0.001	1.29	1.16	1.44	<0.001