

Table S1 Univariate Cox regression analyses

Variables	HR	95% CI	P value
Age (years)			<0.001
65–69	Ref		
70–74	1.58	1.29–1.93	<0.001
75–79	2.05	1.69–2.5	<0.001
80–84	2.31	1.89–2.82	<0.001
85+	4.22	3.48–5.11	<0.001
Sex			<0.001
Female	Ref		
Male	1.36	1.21–1.53	<0.001
Marital status			0.0004
Divorced	Ref		
Married	0.817	0.662–1.01	0.061
Separated	1.27	0.752–2.15	0.368
Unknown	0.749	0.533–1.05	0.098
Unmarried	1.04	0.812–1.33	0.767
Widowed	1.1	0.879–1.37	0.409
Race			0.001
Asian or Pacific Islander	Ref		
Black	1.26	1.11–1.43	<0.001
Other	1.01	0.786–1.3	0.937
Tumor site			0.013
Ascending colon	Ref		
Cecum	1.14	0.935–1.38	0.197
Descending colon	1.15	0.866–1.53	0.334
Hepatic flexure	0.999	0.735–1.36	0.995
Rectosigmoid junction	1.24	0.968–1.59	0.088
Rectum	1.14	0.925–1.41	0.216
Sigmoid colon	1.04	0.856–1.26	0.706
Splenic flexure	1.88	1.4–2.52	<0.001
Transverse colon	1.01	0.793–1.29	0.935
TNM stage			<0.001
IIA	Ref		
IIB	1.69	1.25–2.3	0.001
IIC	1.97	1.45–2.69	<0.001
IIIA	0.843	0.619–1.15	0.276
IIIB	1.43	1.25–1.64	<0.001
IIIC	2.34	1.95–2.81	<0.001
T stage			<0.001
T1	Ref		
T2	0.797	0.465–1.37	0.409
T3	1.11	0.714–1.73	0.637
T4a	2.2	1.38–3.5	0.001
T4b	1.93	1.19–3.12	0.007
N stage			<0.001
N0	Ref		
N1a	1.17	0.986–1.38	0.072
N1b	1.32	1.12–1.56	0.001
N1c	1.68	1.17–2.42	0.005
N2a	1.35	1.11–1.64	0.003
N2b	2.36	1.9–2.94	<0.001
Surgery			<0.001
No	Ref		
Yes	0.264	0.203–0.343	<0.001
Scope of Regional Lymph Node Surgery			<0.001
1 to 3	Ref		
4 or more	0.599	0.414–0.867	0.007
None	1.52	1–2.32	0.050
Sentinel node	0.615	0.147–2.58	0.507
Radiation			0.005
No	Ref		
Yes	0.747	0.604–0.923	0.007
Chemotherapy			<0.001
No	Ref		
Yes	0.67	0.592–0.759	<0.001
CEA level			<0.001
Negative	Ref		
Positive	1.49	1.32–1.68	<0.001