

**Supplementary Table 1.** Independent prognostic factors for colonic adenocarcinoma for  
AJCC stages I–III

Covariate	Reference	Variable	Overall Mortality *		
			HR (95% CI)	SE	P†
Age	(Continuous variable)		1.06 (1.05 to 1.06)	0.003	<.001
Race	White	Black	1.16 (0.96 to 1.41)	0.10	.12
		Other	0.80 (0.63 to 1.01)	0.12	.06
Site	Cecum	Ascending colon	0.93 (0.79 to 1.10)	0.09	.42
		Descending colon	1.03 (0.79 to 1.35)	0.14	.84
		Hepatic flexure of colon	1.41 (1.11 to 1.79)	0.12	.005
		Overlapping lesion of colon	1.20 (0.79 to 1.84)	0.22	.40
		Sigmoid colon	1.05 (0.89 to 1.23)	0.08	.57
		Splenic flexure of colon	1.18 (0.89 to 1.56)	0.14	.25
		Transverse colon	1.19 (0.97 to 1.45)	0.10	.10
C-stage	C0-stage	C1-stage	1.59 (1.42 to 1.79)	0.06	<.001
Histological Grade	Well-Differentiated	Moderately differentiated	1.23 (0.97 to 1.56)	0.12	.09
		Poorly differentiated	1.50 (1.16 to 1.93)	0.13	.002
		Undifferentiated	1.52 (0.95 to 2.44)	0.24	.08
AJCC stage	Stage I	IIA	1.17 (0.96 to 1.42)	0.10	.12
		IIB	2.06 (1.50 to 2.84)	0.16	<.001
		IIC	2.20 (1.55 to 3.11)	0.18	<.001

		IIIA	1.11 (0.75 to 1.66)	0.20	.60
		IIIB	1.92 (1.58 to 2.33)	0.10	<.001
		IIIC	4.07 (3.26 to 5.08)	0.11	<.001
Radiation	None	Performed	1.19 (0.80 to 1.77)	0.20	.39
Surgery	None	Local excision	0.36 (0.16 to 0.81)	0.41	.01
		Surgical resection	0.18 (0.12 to 0.27)	0.22	<.001
Marital Status	Single (never married)	Estranged	0.76 (0.59 to 0.97)	0.13	.03
		Married	0.59 (0.50 to 0.71)	0.09	<.001
		Widowed	0.65 (0.53 to 0.79)	0.10	<.001

\* Multivariable analysis using Cox proportional hazards model of all independent prognostic factors affecting overall mortality at median follow-up of 27 months among AJCC stage I – III patients, diagnosed in 2004 in the SEER17 registries, after application of inclusion and exclusion criteria (n = 6,644). Models were stratified by radiation therapy covariate. The registry in which the patient was registered was also used as a covariate. None of the SEER 17 registries emerged as an independent prognostic factor ( $P > .05$ ). HR = Hazard Ratio; CI = Confidence Interval; SE = Standard Error; SEER = Surveillance, Epidemiology and End Results; AJCC = American Joint Committee on Cancer; C0-stage = normal carcinoembryonic antigen level; C1-stage = elevated carcinoembryonic antigen level. Numbers may not equal the sample size of the final analytic cohort because of missing data on some of the covariates.

† Two-sided  $P$  values were calculated using log-rank test.

‡ Per AJCC Staging Manual (7<sup>th</sup> edition, 2010) (1).

**Supplementary Table 2.** Multivariable analysis to identify independent prognostic factors  
for colonic adenocarcinoma, using availability of C-stage information as one of the covariates

Covariate	Reference	Variable	Overall Mortality *		
			HR (95% CI)	SE	P †
Age	(Continuous variable)		1.04 (1.04 to 1.04)	0.001	<.001
Race	White	Black	1.12 (1.02 to 1.24)	0.05	.02
		Other	0.96 (0.84 to 1.10)	0.07	.59
Origin	Non-Hispanic	Hispanic	1.05 (0.93 to 1.18)	0.06	.43
Site	Cecum	Ascending colon	0.91 (0.83 to 0.99)	0.05	.04
		Descending colon	0.95 (0.83 to 1.09)	0.07	.46
		Hepatic flexure	1.10 (0.96 to 1.25)	0.07	.18
		Overlapping lesion	1.24 (1.03 to 1.49)	0.09	.02
		Sigmoid colon	0.84 (0.78 to 0.91)	0.04	<.001
		Splenic flexure	1.04 (0.90 to 1.21)	0.08	.58
		Transverse colon	1.10 (0.99 to 1.23)	0.06	.08
C-stage	Not available	Available	0.88 (0.83 to 0.93)	0.03	<.001
Histological Grade	Well-Differentiated	Moderately differentiated	1.26 (1.11 to 1.43)	0.07	<.001
		Poorly differentiated	1.73 (1.51 to 1.98)	0.07	<.001
		Undifferentiated	1.20 (1.57 to 2.54)	0.12	<.001
AJCC Staging ‡	Stage I	IIA	1.35 (1.19 to 1.53)	0.07	<.001
		IIB	2.43 (1.96 to 3.02)	0.11	<.001
		IIC	3.15 (2.53 to 3.92)	0.11	<.001
		IIIA	1.13 (0.86 to 1.50)	0.14	.39
		IIIB	2.12 (1.87 to 2.41)	0.07	<.001
		IIIC	4.59 (3.97 to 5.31)	0.07	<.001

Covariate	Reference	Variable	Overall Mortality *		
			HR (95% CI)	SE	P †
		IV	10.42 (9.28 to 11.70)	0.06	<.001
Surgery	None	Local excision	0.51 (0.38 to 0.70)	0.16	<.001
		Surgical resection	0.41 (0.37 to 0.45)	0.05	<.001
Marital Status	Single (never married)	Separated	0.88 (0.77 to 0.99)	0.06	.04
		Married	0.70 (0.64 to 0.77)	0.05	<.001
		Widowed	0.79 (0.71 to 0.88)	0.05	<.001
Regional SEER Registry	Alaska Natives	Atlanta (Metropolitan)	1.79 (0.57 to 5.68)	0.59	.32
		California excluding SF/SJM/LA	1.72 (0.55 to 5.38)	0.58	.35
		Connecticut	1.45 (0.46 to 4.56)	0.59	.53
		Detroit (Metropolitan)	1.76 (0.56 to 5.53)	0.59	.34
		Hawaii	1.48 (0.47 to 4.69)	0.59	.51
		Iowa	1.60 (0.51 to 5.02)	0.59	.43
		Kentucky	2.09 (0.67 to 6.57)	0.58	.21
		Los Angeles	1.72 (0.55 to 5.38)	0.58	.35
		Louisiana	1.98 (0.63 to 6.21)	0.58	.24
		New Jersey	1.61 (0.51 to 5.05)	0.58	.41
		New Mexico	1.63 (0.51 to 5.19)	0.59	.41
		Rural Georgia	1.27 (0.34 to 4.74)	0.67	.72
		San Francisco to Oakland SMSA	1.60 (0.51 to 5.02)	0.58	.42
		San Jose - Monterey	1.13 (0.35 to 3.59)	0.59	.84
		Seattle (Puget - Sound)	1.69 (0.54 to 5.31)	0.59	.37
		Utah	1.98 (0.62 to 6.32)	0.59	.25

\* Multivariable analysis using Cox proportional hazards model of all independent prognostic factors affecting overall mortality at median follow-up of 27 months for all patients diagnosed in 2004 in the SEER 17 registries, after application of inclusion and exclusion criteria (N = 17,910 patients), including those with unavailable C-stage information (n = 8827 patients). Models were stratified by radiation therapy covariate. The registry in which the patient was registered was also used as a covariate. Numbers may not equal the sample size of the final analytic cohort because of missing data on some of the covariates. HR = Hazard Ratio; CI = Confidence Interval; SE = Standard Error; SEER = Surveillance, Epidemiology and End Results. AJCC = American Joint Committee on Cancer, SF = San Francisco, SJM = San Jose Monterey, LA = Los Angeles; SMSA = Standard Metropolitan Statistical Area.

† Two-sided *P* values were calculated using log-rank test.

‡ Per AJCC Staging Manual (7<sup>th</sup> edition, 2010) (1).

## Reference

1. Edge SB, Byrd DR, Compton CC ea. American Joint Committee on Cancer Cancer Staging Manual, 7th ed, (Eds), Springer, New York 2010.