

## Supplementary Tables

Supplementary Table 1: Distribution of demographic and clinical characteristics of appendiceal and cecal adenocarcinomas

Variable	Category	Appendiceal cancer	Cecal cancer
		Total Number (%)	Total Number (%)
		6491 (6.13)	99387 (93.87)
Sex	Male	4756 (45.49)	45004 (42.68)
	Female	5699 (54.51)	60437 (57.32)
Age Quartile	Quartile 1: ≤61	3655 (56.31)	23126 (23.27)
	Quartile 2: >61 and ≤72	1591 (24.51)	22642 (22.78)
	Quartile 3: >72 and ≤81	824 (12.69)	27032 (27.20)
	Quartile 4: >81	421 (6.49)	26587 (26.75)
Year of Diagnosis	2006-2016	7115 (68.05)	43950 (41.68)
	1991-2005	2681 (25.64)	41997 (39.83)
	1975-1990	659 (6.30)	19494 (18.49)
Race	White	8766 (83.85)	87592 (83.07)
	Asian/Pacific Islander/American Indian/Alaska Native	682 (6.52)	5263 (4.99)
	Black	1007 (9.63)	12586 (11.94)
Ethnicity	Non-Hispanic	9346 (89.39)	97680 (92.64)
	Hispanic	1109 (10.61)	7761 (7.36)
Marital Status	Married	6301 (60.27)	53203 (50.46)
	Divorced	879 (8.41)	7758 (7.36)
	Separated	135 (1.29)	1377 (1.31)
	Never married	1811 (17.32)	12182 (11.55)
	Widowed	836 (8.00)	26702 (25.32)
	Unmarried or domestic partner	25 (0.24)	47 (0.04)
	Unknown	468 (4.48)	4172 (3.96)
Histology	Non-mucinous	2235 (34.43)	84812 (85.34)
	Mucinous	3602 (55.49)	13136 (13.22)
	Signet-ring cell	654 (10.08)	1439 (1.45)
Stage	Local	3457 (33.07)	24300 (23.05)
	Regional	2376 (22.73)	29581 (28.05)
	Distant	3185 (30.46)	17303 (16.41)
	Unknown	1437 (13.74)	34257 (32.49)
Grade	I: Well differentiated	2965 (28.36)	9230 (8.75)
	II: Moderately differentiated	2491 (23.83)	57777 (54.80)
	III: Poorly differentiated	1385 (13.25)	22069 (20.93)
	IV: Undifferentiated; anaplastic	168 (1.61)	2419 (2.29)
	Unknown	3446 (32.96)	13946 (13.23)

Surgery	Surgery Performed	5921 (91.22)	91239 (91.80)
	No Surgery	551 (8.49)	7718 (7.77)
	Unknown	19 (0.29)	430 (0.43)
Chemotherapy	Chemotherapy	3481 (33.30)	28908 (27.42)
	No chemotherapy/Unknown	6974 (66.70)	76533 (72.58)

Supplementary Table 2: Demographic, clinical, and county-level socioeconomic factors associated with five-year overall survival in appendiceal and cecal adenocarcinoma using multivariable Cox regression analysis

Variable	Category	Hazard Ratio	95% Confidence Interval	P-value*
Sex	Male	1		
	Female	0.84	0.82-0.85	<0.001
Age Quartile	Quartile 1: ≤61	1		
	Quartile 2: >61 and ≤72	1.23	1.20-1.26	<0.001
	Quartile 3: >72 and ≤81	1.55	1.51-1.59	<0.001
	Quartile 4: >81	2.32	2.25-2.39	<0.001
Year of Diagnosis	2005-2016	1		
	1991-2005	1.25	1.12-1.29	<0.001
	1975-1990	1.45	1.39-1.51	<0.001
Race	White	1		
	Asian/Pacific Islander/American Indian/Alaska Native	0.91	0.87-0.95	<0.001
	Black	1.16	1.13-1.19	<0.001
Ethnicity	Non-Hispanic	1		
	Hispanic	0.95	0.91-0.98	0.002
Marital Status	Married	1		
	Divorced	1.21	1.17-1.25	<0.001
	Separated	1.11	1.03-1.20	0.006
	Never married	1.19	1.15-1.22	<0.001
	Widowed	1.14	1.11-1.17	<0.001
	Unmarried or domestic partner	0.76	0.45-1.29	0.31
	Unknown	1.08	1.03-1.13	0.002
Tumor Location	Cecum	1		
	Appendix	0.71	0.68-0.74	<0.001
Histology	Non-mucinous	1		
	Mucinous	0.94	0.92-0.97	<0.001
	Signet-ring cell	1.30	1.23-1.37	<0.001
Stage	Local	1		
	Regional	1.99	1.93-2.06	<0.001
	Distant	6.64	6.42-6.87	<0.001
	Unknown	2.41	2.33-2.50	<0.001
Grade	I: Well differentiated	1		
	II: Moderately differentiated	1.22	1.18-1.26	<0.001
	III: Poorly differentiated	1.74	1.68-1.80	<0.001
	IV: Undifferentiated; anaplastic	1.98	1.85-2.11	<0.001
	Unknown	1.30	1.25-1.36	<0.001

Surgery	Surgery	1		
	No surgery	2.81	2.73-2.90	<b>&lt;0.001</b>
	Unknown	2.78	2.51-3.09	<b>&lt;0.001</b>
Chemotherapy	Chemotherapy	1		
	No chemotherapy/Unknown	1.10	1.08-1.12	<b>&lt;0.001</b>
Percent Smokers	>50 <sup>th</sup> percentile	1.01	0.98-1.04	0.44
	<50 <sup>th</sup> percentile	1		
Percent College Education	>50 <sup>th</sup> percentile	0.99	0.97-1.01	0.28
	<50 <sup>th</sup> percentile	1		
Percent Minority	>50 <sup>th</sup> percentile	1.01	0.98-1.04	0.56
	<50 <sup>th</sup> percentile	1		
Percent Urban Population	>50 <sup>th</sup> percentile	1.00	0.97-1.02	0.65
	<50 <sup>th</sup> percentile	1		
Percent Foreign-born Population	>50 <sup>th</sup> percentile	0.97	0.94-1.00	0.05
	<50 <sup>th</sup> percentile	1		
Percent Below Poverty Line	>50 <sup>th</sup> percentile	1.05	1.03-1.08	<b>&lt;0.001</b>
	<50 <sup>th</sup> percentile	1		
Percent Colorectal Cancer Screening	>50 <sup>th</sup> percentile	0.93	0.92-0.95	<b>&lt;0.001</b>
	<50 <sup>th</sup> percentile	1		

\*The significance level was set at  $p < 0.05$ . Significant p-values are shown in bold.