

Supplementary Online Content

Karim S, Brennan K, Nanji S, Berry SR, Booth CM. Association between prognosis and tumor laterality in early-stage colon cancer. *JAMA Oncol*. Published online June 8, 2017. doi:10.1001/jamaoncol.2017.1016

eFigure. Identification of Patients With Resected Colon Cancer in Ontario During 2002-2008

eTable 1. Patient-Level Factors Associated With Right-Sided Colon Cancer Among Patients With Early-Stage Disease Resected in Ontario During 2002-2008 (n=6365)

eTable 2. Factors Associated With Right-Sided Colon Cancer Among Patients With Stage III Disease Resected in Ontario During 2002-2008 (n=2756)

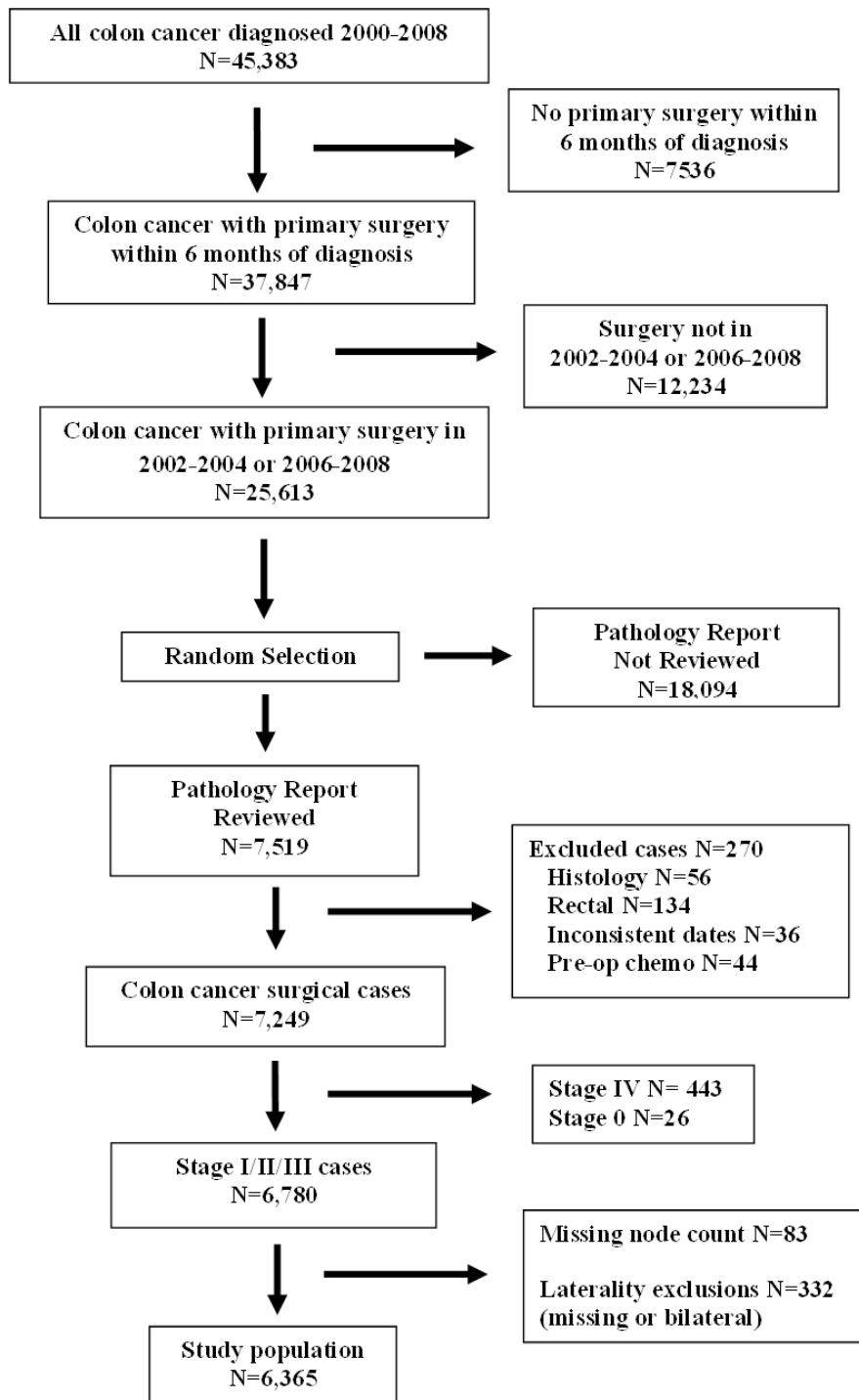
eTable 3. Factors Associated With Survival Among Patients With Resected Colon Cancer Stage I in Ontario During 2002-2008 (n=1163)

eTable 4. Factors Associated With Survival Among Patients With Resected Colon Cancer Stage II in Ontario During 2002-2008 (n=2446)

eTable 5. Factors Associated With Survival Among Patients With Resected Colon Cancer Stage III in Ontario During 2002-2008 (n=2756)

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure. Identification of Patients With Resected Colon Cancer in Ontario During 2002-2008



eTable 1. Patient-Level Factors Associated With Right-Sided Colon Cancer Among Patients With Early-Stage Disease Resected in Ontario During 2002-2008 (n=6365)

		Right sidedness	
Co-Variate		Multivariate analysis	
	% Right sided	RR (95%CI)^{&}	P-value
Patient-related			
Age, years			<0.001
<60	43%	Ref	
60-69	46%	1.07 (0.98-1.16)	
70-79	54%	1.25 (1.15-1.35)	
80+	61%	1.34 (1.24-1.45)	
Sex			<0.001
Male	46%	Ref	
Female	58%	1.24 (1.18-1.30)	
Charlson co-morbidity score			0.001
0	50%	Ref	
1+	58%	1.10 (1.04-1.15)	

[&]Log binomial regression was used to estimate relative risks

eTable 2. Factors Associated With Right-Sided Colon Cancer Among Patients With Stage III Disease Resected in Ontario During 2002-2008 (n=2756)

		Right sidedness	
Co-Variate		Multivariate analysis	
	% Right-sided	RR (95%CI)^{&}	P-value
Patient-related			
Age, years			<0.001
<60 (n=611)	43%	Ref	
60-69 (n=702)	45%	1.08 (0.96-1.22)	
70-79 (n=861)	52%	1.19 (1.07-1.34)	
80+ (n=582)	61%	1.36 (1.21-1.52)	
Sex			<0.001
Male (n=1443)	44%	Ref	
Female (n=1313)	57%	1.27 (1.18-1.37)	
Charlson co-morbidity score			0.016
0 (n=2214)	48%	Ref	
1+ (n=542)	57%	1.11 (1.02-1.21)	

[&]log binomial regression was used to estimate relative risks

eTable 3. Factors Associated With Survival Among Patients With Resected Colon Cancer Stage I in Ontario During 2002-2008 (n=1163)

Co-Variate	Overall Survival			Cancer-Specific Survival		
	5 year OS	Multivariate analysis		5 year CSS	Multivariate analysis	
		HR (95%CI)	P Trend		HR (95%CI)	P Trend
Age, years			<0.001			<0.001
<60	95%	Ref		97%	Ref	
60-69	92%	1.57 (0.83-2.97)		95%	1.18 (0.47-2.96)	
70-79	80%	3.56 (2.00-6.35)		91%	2.55 (1.13-5.75)	
80+	59%	9.25 (5.19-16.5)		83%	5.37 (2.37-12.1)	
Sex			0.034			0.010
Male	79%	Ref		90%	Ref	
Female	82%	0.78 (0.62-0.98)		93%	0.58 (0.39-0.88)	
Socioeconomic status#			0.655			0.066
Q1	74%	1.22 (0.83-1.80)		86%	2.04 (0.99-4.20)	
Q2	81%	0.96 (0.65-1.42)		95%	0.89 (0.40-1.95)	
Q3	81%	1.03 (0.70-1.53)		91%	1.42 (0.67-2.98)	
Q4	83%	0.98 (0.65-1.49)		91%	1.54 (0.72-3.31)	
Q5	82%	Ref		93%	Ref	
Charlson co-morbidity score			<0.001			0.037
0	86%	Ref		93%	Ref	
1+	63%	2.50 (1.98-3.15)		86%	1.57 (1.03-2.39)	
Lymphovascular invasion			0.388			0.889
No	81%	Ref		92%	Ref	
Yes	83%	0.72 (0.40-1.28)		92%	1.18 (0.51-2.72)	
NA	74%	1.15 (0.79-1.69)		88%	1.11 (0.57-2.17)	
Grade**			0.026			0.405
Well-moderately differentiated	80%	Ref		91%	Ref	
Poorly differentiated	78%	1.69 (1.07-2.67)		90%	1.43 (0.62-3.29)	
Laterality			0.404			0.125
Right	78%	1.10 (0.88-1.39)		92%	0.73 (0.48-1.09)	
Left	82%	Ref		91%	Ref	

Socioeconomic status quintile 1 represents the lowest socioeconomic status. SES data were not available for 6 patients.

**Grade unstated for 31 patients

eTable 4. Factors Associated With Survival Among Patients With Resected Colon Cancer Stage II in Ontario During 2002-2008 (n=2446)

Co-Variate	Overall Survival			Cancer-Specific Survival		
	5 year OS	Multivariate analysis		5 year CSS	Multivariate analysis	
		HR (95%CI)	P Trend		HR (95%CI)	P Trend
Age, years			<0.001			<0.001
<60 (n=411)	86%	Ref		88%	Ref	
60-69 (n=526)	79%	1.34 (1.00-1.78)		84%	1.21 (0.86-1.70)	
70-79 (n=835)	69%	2.24 (1.74-2.89)		78%	1.63 (1.19-2.22)	
80+ (n=674)	54%	3.88 (2.98-5.05)		71%	2.47 (1.78-3.43)	
Sex			<0.001			0.001
Male (n=1243)	68%	Ref		78%	Ref	
Female (n=1203)	72%	0.72 (0.63-0.82)		81%	0.72 (0.60-0.87)	
Socioeconomic status			0.013			0.326
Q1 (n=541)	65%	1.20 (0.96-1.50)		76%	1.12 (0.83-1.51)	
Q2 (n=576)	66%	1.12 (0.90-1.40)		78%	1.02 (0.76-1.38)	
Q3 (n=527)	73%	0.90 (0.72-1.14)		82%	0.86 (0.63-1.18)	
Q4 (n=434)	74%	0.92 (0.72-1.17)		82%	0.88 (0.64-1.22)	
Q5 (n=361)	74%	Ref		80%	Ref	
Charlson co-morbidity score			<0.001			0.020
0 (n=1896)	74%	Ref		81%	Ref	
1+ (n=550)	54%	1.85 (1.61-2.12)		75%	1.28 (1.04-1.59)	
Lymphovascular invasion			<0.001			<0.001
No (n=1920)	72%	Ref		82%	Ref	
Yes (n=343)	56%	1.63 (1.37-1.94)		66%	1.69 (1.34-2.12)	
NA (n=183)	70%	1.16 (0.91-1.48)		81%	1.21 (0.87-1.69)	
Tstage			<0.001			<0.001
T3 (n=2044)	72%	Ref		83%	Ref	
T4 (n=402)	56%	1.68 (1.43-1.98)		63%	2.28 (1.85-2.80)	
Grade**			0.297			0.030
Well-moderately differentiated (n=2081)	70%	Ref		80%	Ref	
Poorly differentiated (n=323)	64%	1.10 (0.92-1.32)		72%	1.30 (1.03-1.66)	
Adjuvant chemotherapy			0.421			0.625
Yes (n=432)	75%	0.92 (0.75-1.13)		79%	1.07 (0.83-1.37)	
No (n=2014)	69%	Ref		80%	Ref	
Laterality			0.101			0.052
Right (n=1348)	70%	0.89 (0.78-1.02)		81%	0.83 (0.69-1.00)	
Left (n=1098)	70%	Ref		78%	Ref	

Socioeconomic status quintile 1 represents the lowest socioeconomic status. SES data were not available for 7 patients.

**Grade unstated for 42 patients

eTable 5. Factors Associated With Survival Among Patients With Resected Colon Cancer Stage III in Ontario During 2002-2008 (n=2756)

Co-Variate	Overall Survival			Cancer-Specific Survival		
	5 year OS	Multivariate analysis		5 year CSS	Multivariate analysis	
		HR (95%CI)	P Trend		HR (95%CI)	P Trend
Age, years			<0.001			0.004
<60 (n=611)	60%	Ref		62%	Ref	
60-69 (n=702)	53%	1.19 (1.02-1.40)		56%	1.19 (1.00-1.42)	
70-79 (n=861)	44%	1.41 (1.21-1.64)		49%	1.37 (1.15-1.62)	
80+ (n=582)	29%	1.69 (1.43-2.01)		42%	1.31 (1.08-1.60)	
Sex			0.001			0.010
Male (n=1443)	46%	Ref		51%	Ref	
Female (n=1313)	47%	0.84 (0.76-0.93)		53%	0.86 (0.76-0.96)	
Socioeconomic status			0.232			0.190
Q1 (n=582)	45%	1.03 (0.87-1.22)		51%	1.03 (0.84-1.25)	
Q2 (n=647)	42%	1.16 (0.99-1.37)		48%	1.19 (0.98-1.44)	
Q3 (n=588)	48%	1.00 (0.84-1.18)		54%	0.99 (0.82-1.21)	
Q4 (n=494)	49%	1.08 (0.90-1.28)		53%	1.11 (0.91-1.36)	
Q5 (n=439)	52%	Ref		56%	Ref	
Charlson co-morbidity score			<0.001			0.381
0 (n=2214)	50%	Ref		54%	Ref	
1+ (n=542)	33%	1.29 (1.14-1.45)		43%	1.07 (0.92-1.23)	
Lymphovascular invasion			<0.001			<0.001
No (n=1178)	56%	Ref		63%	Ref	
Yes (n=1363)	40%	1.27 (1.14-1.42)		44%	1.34 (1.18-1.53)	
NA (n=215)	43%	1.32 (1.09-1.60)		47%	1.45 (1.17-1.80)	
Tstage			<0.001			<0.001
≤T1 (n=42)	71%	Ref		76%	Ref	
T2 (n=171)	75%	0.80 (0.43-1.49)		84%	0.70 (0.30-1.60)	
T3 (n=1824)	50%	1.46 (0.82-2.59)		55%	1.83 (0.87-3.87)	
T4 (n=719)	31%	2.28 (1.28-4.06)		35%	3.09 (1.46-6.55)	
Nstage			<0.001			<0.001
N1 (n=1629)	55%	Ref		62%	Ref	
N2 (n=1127)	35%	1.65 (1.49-1.84)		38%	1.93 (1.71-2.18)	
Grade**			<0.001			<0.001
Well-moderately differentiated (n=2099)	50%	Ref		56%	Ref	
Poorly differentiated	37%	1.26 (1.12-1.42)		39%	1.35 (1.18-1.54)	

(n=608)						
Adjuvant chemotherapy			<0.001			<0.001
Yes (n=1758)	58%	0.45 (0.40-0.50)		61%	0.43 (0.38-0.49)	
No (n=998)	27%	Ref		36%	Ref	
Laterality			0.583			0.139
Right (n=1383)	43%	1.03 (0.93-1.14)		48%	1.10 (0.97-1.24)	
Left (n=1373)	51%	Ref		56%	Ref	

Socioeconomic status quintile 1 represents the lowest socioeconomic status. SES data were not available for 6 patients.

^ ≤T1 = pTX, or pT0, or pTis or pT1.

**Grade unstated for 49 patients