

**Supplement Table 1 Univariate Cox regression of all candidate variables**

	Total	Univariate	
	n (%)	HR (95% CI)	P value
Age <sup>a</sup>		1.08 (1.02, 1.14)	<b>0.005</b>
Age			
80-89	269 (91.19)	Ref.	
90-99	26 (8.81)	1.31 (0.63, 2.73)	0.47
ASA classification			
1/2/3	279 (94.58)	Ref.	
4	16 (5.42)	1.73 (0.63, 4.77)	0.29
BMI (kg/m <sup>2</sup> )			
≥ 18.5	252 (85.42)	Ref.	
< 18.5	43 (14.58)	1.93 (1.12, 3.33)	<b>0.02</b>
Smoking			
No	281 (95.25)	Ref.	
Yes	14 (4.75)	1.86 (0.80, 4.29)	0.15
Congestive heart failure within 30 days			
No	289 (97.97)	Ref.	
Yes	6 (2.03)	0.70 (0.10, 5.08)	0.73
COPD			
No	291 (98.64)	Ref.	
Yes	4 (1.36)	3.18 (1.00, 10.1)	0.05
Hypertension requiring medication			
No	72 (24.41)	Ref.	
Yes	223 (75.59)	0.48 (0.30, 0.77)	<b>0.003</b>
Diabetes mellitus			
No	217 (73.56)	Ref.	
Yes	78 (26.44)	1.15 (0.70, 1.92)	0.58
CCI <sup>a</sup>		1.34 (1.21, 1.48)	< 0.001
Immunosuppressive therapy			
No	292 (98.98)	Ref.	
Yes	3 (1.02)	2.32 (0.56, 9.54)	0.24
Bleeding disorder			
No	287 (97.29)	Ref.	
Yes	8 (2.71)	2.13 (0.78, 5.86)	0.14
Preoperative dialysis dependent			
No	291 (98.64)	Ref.	
Yes	4 (1.36)	1.05 (0.15, 7.59)	0.96
Preoperative transfusion within 72 h			
No	271 (91.86)	Ref.	
Yes	24 (8.14)	1.93 (0.93, 4.04)	0.08
Preoperative sepsis			
No	266 (90.17)	Ref.	
Yes	29 (9.83)	1.74 (0.91, 3.30)	0.09
Serum albumin (g/dL)			
≥ 3.0	261 (88.48)	Ref.	
2.5-3.0	27 (9.15)	1.75 (0.90, 3.44)	0.10

< 2.5	7 (2.37)	7.15 (2.82, 18.2)	< 0.001
<b>Priority of operation</b>			
Elective	206 (69.83)	Ref.	
Emergency	89 (30.17)	1.81 (1.13, 2.88)	0.01
<b>Method of operation</b>			
Open	135 (45.76)	Ref.	
Minimally Invasive Surgery (MIS)	160 (54.24)	0.56 (0.35, 0.89)	0.01
<b>Type of operation</b>			
Right hemicolectomy (RH)	110 (37.29)	Ref.	
Left hemicolectomy (LH)	8 (2.71)	1.13 (0.34, 3.69)	0.84
High anterior resection (HAR)	86 (29.15)	0.67 (0.37, 1.23)	0.20
Low anterior resection (LAR)	52 (17.63)	0.52 (0.25, 1.08)	0.08
Subtotal/Total colectomy	13 (4.40)	1.73 (0.67, 4.47)	0.26
Abdominoperineal resection (APR)	12 (4.07)	1.18 (0.42, 3.36)	0.75
Hartmann's procedure	14 (4.75)	1.88 (0.73, 4.86)	0.19
<b>Stoma</b>			
No	205 (69.49)	Ref.	
Yes	90 (30.51)	1.97 (1.24, 3.12)	0.004
<b>TNM staging</b>			
I/II/III	278 (94.24)	Ref.	
IV	17 (5.76)	3.95 (2.07, 7.55)	< 0.001
<b>Postoperative surgical site infection (SSI)</b>			
No	257 (87.12)	Ref.	
Yes	38 (12.88)	1.45 (0.78, 2.70)	0.24
<b>Postoperative wound disruption</b>			
No	294 (99.66)	Ref.	
Yes	1 (0.34)	3.88 (0.54, 28.1)	0.18
<b>Postoperative pneumonia</b>			
No	276 (93.56)	Ref.	
Yes	19 (6.44)	3.46 (1.77, 6.78)	< 0.001
<b>Postoperative unplanned intubation</b>			
No	287 (97.29)	Ref.	
Yes	8 (2.71)	3.49 (1.27, 9.64)	0.02
<b>Postoperative pulmonary embolism</b>			
No	290 (98.31)	Ref.	
Yes	5 (1.69)	2.38 (0.58, 9.75)	0.23
<b>Postoperative renal insufficiency</b>			
No	292 (98.98)	Ref.	
Yes	3 (1.02)	1.17 (0.16, 8.45)	0.88
<b>Postoperative urinary tract infection (UTI)</b>			
No	283 (95.93)	Ref.	
Yes	12 (4.07)	1.80 (0.65, 4.93)	0.26
<b>Postoperative Stroke/Cerebral Vascular Accident (CVA)</b>			
No	288 (97.63)	Ref.	
Yes	7 (2.37)	2.05 (0.50, 8.41)	0.32
<b>Postoperative myocardial infarction</b>			
No	288 (97.63)	Ref.	
Yes	7 (2.37)	6.01 (2.17, 16.6)	< 0.001

<b>Postoperative transfusion within 72 h</b>			
No	239 (81.02)	Ref.	
Yes	56 (18.98)	1.05 (0.57, 1.91)	0.89
<b>Postoperative venous thrombosis requiring therapy</b>			
No	290 (98.31)	Ref.	
Yes	5 (1.69)	1.82 (0.45, 7.44)	0.40
<b>Postoperative anastomotic leak</b>			
No	289 (97.97)	Ref.	
Yes	6 (2.03)	2.12 (0.66, 6.74)	0.21
<b>Postoperative sepsis</b>			
No	283 (95.93)	Ref.	
Yes	12 (4.07)	3.18 (1.45, 6.96)	<b>0.004</b>
<b>Postoperative sepsis shock</b>			
No	289 (97.97)	Ref.	
Yes	6 (2.03)	1.47 (0.36, 6.02)	0.59

<sup>a</sup> Continuous variables

Categorical variables were presented as *n* (%).

Bold values indicate statistical significance at the *P* < 0.05 level.

HR: hazard ratio; CI: confidence interval; ASA: American Society of Anaesthesiologists classification; BMI: body mass index; COPD: chronic obstructive pulmonary disease; CCI: Charlson Comorbidity Index; TNM: tumor-node-metastasis.