

Supplementary Table 3. Univariable and multivariable analyses of disease-free and overall survival for the retrospective real-world cohort (N=1,095)

Variable	Groups	Disease-free survival				Overall survival			
		Univariable HR	P	Multivariable HR*	P	Univariable HR	P	Multivariable HR*	P
Age	≤70 >70	- 2.69 (2.15-3.36)	 <0.001	- 1.91 (1.37-2.66)	 <0.001	- 3.68 (2.84-4.76)	 <0.001	- 2.50 (1.70-3.69)	 <0.001
Gender	Male Female	- 0.82 (0.66-1.02)	 0.071	- 0.75 (0.57-1.00)	 0.046	- 0.84 (0.67-1.06)	 0.153	- 0.72 (0.53-0.98)	 0.038
ECOG status	0 ≥1	- 2.17 (1.71-2.75)	 <0.001	- 1.76 (1.31-2.36)	 <0.001	- 3.10 (2.36-4.07)	 <0.001	- 2.00 (1.44-2.79)	 <0.001
ASA score	1-2 ≥3	- 2.56 (2.02-3.25)	 <0.001	- 1.58 (1.17-2.14)	 0.003	- 3.22 (2.47-4.19)	 <0.001	- 1.84 (1.31-2.58)	 <0.001
Primary tumor location	Right colon Left colon or rectum	- 1.03 (0.83-1.27)	 0.814	- 0.97 (0.73-1.27)	 0.808	- 0.86 (0.69-1.08)	 0.203	- 0.73 (0.53-0.99)	 0.040
Campus type	Public Private	- 0.54 (0.41-0.72)	 <0.001	- 0.70 (0.46-1.06)	 0.094	- 0.39 (0.27-0.55)	 <0.001	- 0.45 (0.27-0.76)	 0.003
IRSAD	Intermediate-High Low	- 1.10 (0.87-1.39)	 0.424	- 1.34 (1.00-1.80)	 0.054	- 1.02 (0.79-1.32)	 0.885	- 1.25 (0.91-1.73)	 0.170
Smoking history	Former or never Current	- 1.21 (0.89-1.65)	 0.221	- 1.57 (1.05-2.34)	 0.027	- 1.46 (1.06-2.01)	 0.019	- 2.08 (1.36-3.20)	 0.001
Presentation	Screen-detected Other	- 1.77 (1.12-2.82)	 0.015	- 1.69 (0.96-2.99)	 0.069	- 1.96 (1.14-3.35)	 0.014	- 1.49 (0.78-2.85)	 0.228
Diabetes	No Yes	- 1.49 (1.17-1.88)	 0.001	- 0.99 (0.73-1.36)	 0.974	- 1.42 (1.10-1.84)	 0.008	- 0.88 (0.62-1.23)	 0.452
Post-operative complications	No Yes	- 1.87 (1.50-2.33)	 <0.001	- 1.48 (1.11-1.98)	 0.007	- 2.24 (1.76-2.85)	 <0.001	- 1.73 (1.26-2.38)	 0.001
Adjuvant chemotherapy	No Yes	- 0.57 (0.43-0.76)	 <0.001	- 1.19 (0.80-1.78)	 0.390	- 0.50 (0.36-0.70)	 <0.001	- 1.15 (0.72-1.82)	 0.562
Trial participation	No Yes	- 1.10 (0.89-1.36)	 0.371	- 1.06 (0.81-1.40)	 0.667	- 1.06 (0.84-1.33)	 0.618	- 0.83 (0.61-1.12)	 0.224

ASA; American Society of Anesthesiologists, ECOG; Eastern Co-operative Oncology Group, IRSAD; Index of Relative Socioeconomic Advantage and Disadvantage

*Only in 701 patients with complete data for all variables (217 DFS events, 180 OS events)