A

B

C

Figure S1 ROC curves of the nomogram for 1-year (A), 3-year (B) and 5-year (C) CSS in training set and validation set.
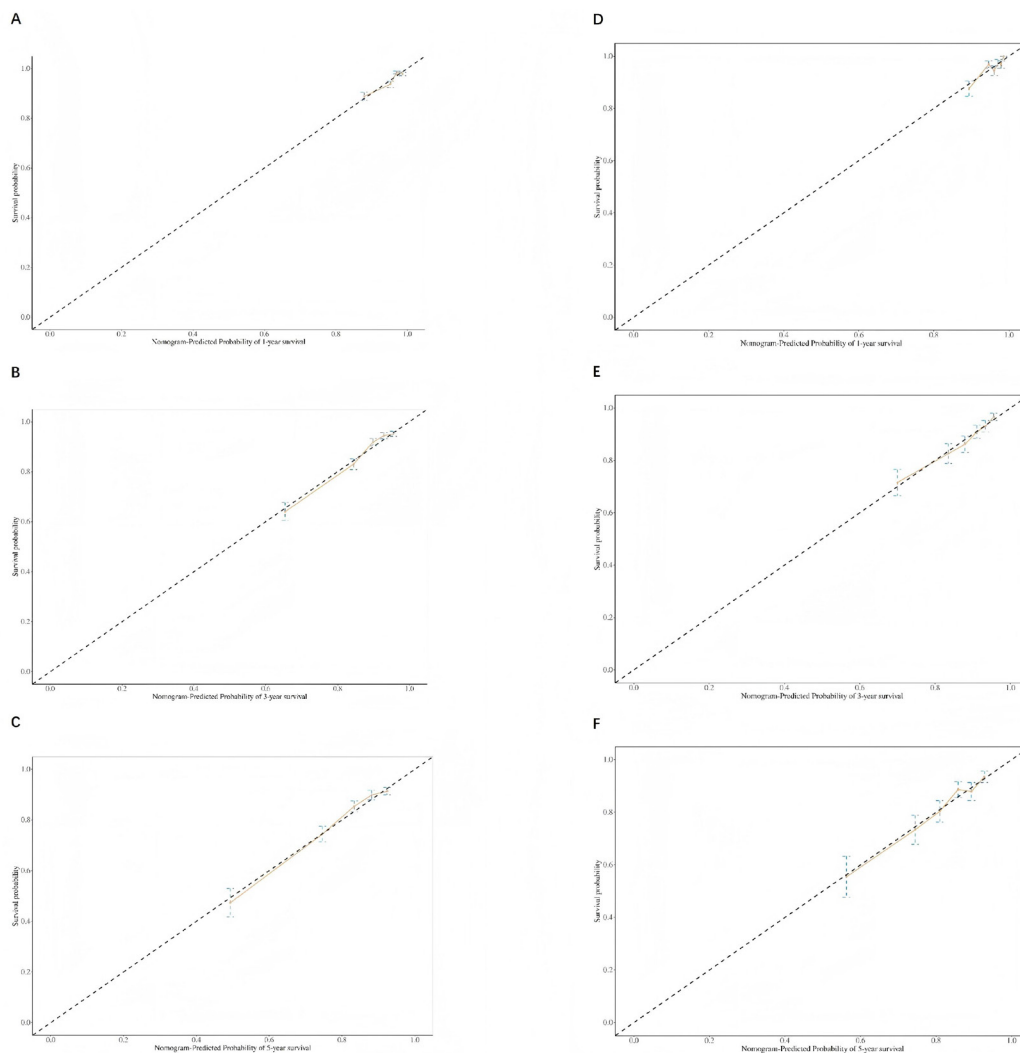
Figure S2 Calibration plots of training set for 1-year (A), 3-year (B) and 5-year (C) CSS; calibration plots of validation set for 1-year (D), 3-year (E) and 5-year (F) CSS.
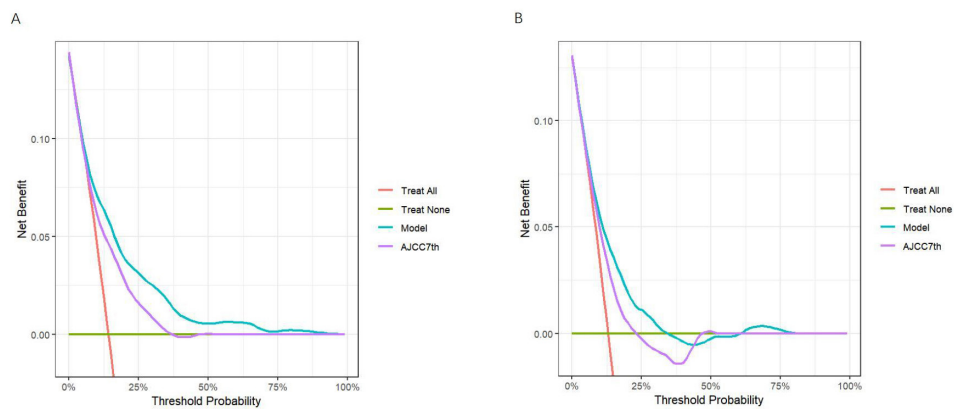

Figure S3 Decision curve analysis of nomogram and AJCC 7th staging system for the CSS prediction in training cohort (A) and validation cohort (B). None: none of the patients have a bad outcome. All: bad outcomes occur in all patients.
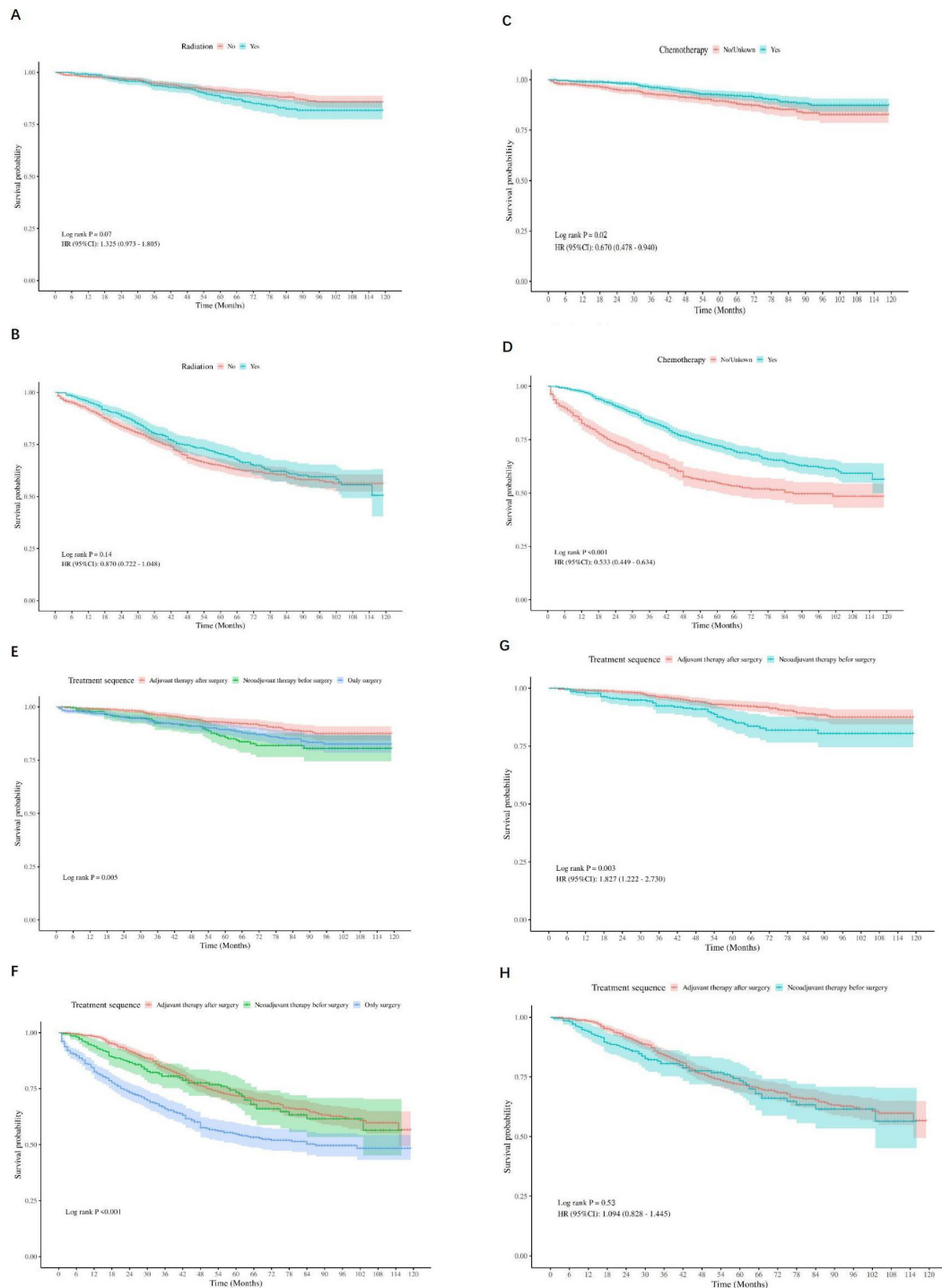
Figure S4 The CSS comparison between LARSJC patients who received radiotherapy and those who did not receive radiotherapy in the low-risk group (A) and high-risk group (B). The CSS comparison between LARSJC patients who received chemotherapy and those who did not receive chemotherapy in the low-risk group (C) and high-risk group (D). The CSS comparison between LARSJC patients who received different treatment sequence in the low-risk group (E) and high-risk group (F). The CSS comparison between LARSJC patients who received adjuvant therapy after surgery and those who received neoadjuvant therapy before surgery in the low-risk group (G) and high-risk group (H).

Table S1 Univariate and multivariate Cox analysis for cancer-specific survival of locally advanced rectosigmoid junction cancer patients

Characteristics	Univariate analysis		Multivariate analysis	
	HR (95% CI)	P value	HR (95% CI)	P value
Sex				
Female	Ref			
Male	1.15 (0.99–1.34)	0.07		
Age (years)				
<60	Ref		Ref	
≥60	1.57 (1.35–1.82)	<0.001*	1.59 (1.36–1.86)	<0.001*
Histology				
Adenocarcinoma	Ref		Ref	
Others	2.65 (1.81–5.94)	<0.001*	1.34 (1.04–2.04)	0.003*
Reginal lymph node dissection				
No	Ref			
Yes	0.74 (0.39–1.28)	0.25		
Radiation				
No	Ref			
Yes	0.99 (0.85–1.17)	0.94		
Chemotherapy				
No/unknown	Ref		Ref	
Yes	0.65 (0.56–0.76)	<0.001*	0.89 (0.78–1.36)	0.89
Treatment sequence				
Only surgery	Ref		Ref	
Adjuvant therapy	0.63 (0.53–0.73)	<0.001*	0.43 (0.35–0.52)	<0.001*
Neoadjuvant therapy	0.72 (0.57–0.90)	0.005*	0.57 (0.43–0.76)	<0.001*
Grade				
Well and moderate	Ref		Ref	
Poor and undifferentiated	1.80 (1.51–2.14)	<0.001*	1.34 (1.11–1.60)	0.002
Pretreatment carcinoembryonic antigen				
Negative	Ref		Ref	
Positive	2.20 (1.88–2.55)	<0.001*	1.78 (1.53–2.07)	<0.001*
Perineural invasion				
No	Ref		Ref	
Yes	2.46 (2.09–2.89)	<0.001*	1.67 (1.40–2.00)	<0.001*
Tumor deposits				
No	Ref		Ref	
Yes	2.19 (1.84–2.60)	<0.001*	1.46 (1.21–1.74)	<0.001*
Tumor size (mm)				
<56	Ref		Ref	
≥56	1.46 (1.25–1.70)	<0.001*	1.20 (1.03–1.41)	0.02*
Race				
White	Ref		Ref	
Others	1.40 (1.15–1.69)	<0.001*	1.29 (1.06–1.57)	0.01*
N stage				
N0	Ref		Ref	
N1	1.35 (1.12–1.62)	0.001	1.91 (1.56–2.34)	<0.001*
N2	2.31 (1.91–2.79)	<0.001*	2.64 (2.12–3.29)	<0.001*
T stage				
T1/T2	Ref		Ref	
T3	2.39 (1.61–3.55)	0.007*	1.94 (1.29–2.91)	0.001*
T4	6.77 (4.51–10.17)	<0.001*	4.64 (3.04–7.09)	<0.001*

*, statistical significance.