

Figure S1 The appropriate cutoff values of age, PSA and total risk score were by X-tile analysis. (A-C) The appropriate cutoff values of age were 68 and 78 years. Blue: <68 years old; gray: 68–78 years old; purple: >78 years old. (D-F) The appropriate cutoff values of PSA were 18 and 67 ng/mL. Blue: <18 ng/mL; gray: 18–67 ng/mL; purple: >67 ng/mL. (G-I) The appropriate cutoff values of total risk score were 209. Blue: <209; gray: \geq 209. The black dots in (C) and (F) represent the center point of the group.

Table S1 Baseline demographic and clinicopathological characteristics

Variables	SEER (n=1,171), n (%)	Training (n=819), n (%)	Validation (n=352)		External validation (n=138)	
			N (%)	P value	N (%)	P value
Age				0.89		0.13
<68 years	614 (52.4)	433 (52.9)	181 (51.4)		64 (46.4)	
68–78 years	370 (31.6)	256 (31.2)	114 (32.4)		55 (39.9)	
>78 years	187 (16.0)	130 (15.9)	57 (16.2)		19 (13.8)	
Marital				0.64		0.001
Married	793 (67.7)	549 (67.1)	244 (69.3)		118 (85.5)	
Single	163 (13.9)	114 (13.9)	49 (13.9)		2 (1.4)	
D/S/W	215 (18.4)	156 (19.0)	59 (16.8)		18 (13.0)	
Race				0.10		0.001
White	870 (74.3)	619 (75.6)	251 (71.3)		0	
Black	224 (19.1)	154 (18.8)	70 (19.9)		0	
Others	77 (6.6)	46 (5.6)	31 (8.8)		138 (100.0)	
PSA				0.34		0.001
<18 ng/mL	377 (32.2)	253 (30.9)	124 (35.2)		8 (5.8)	
18–67 ng/mL	291 (24.8)	208 (25.4)	83 (23.6)		18 (13.0)	
>67 ng/mL	503 (43.0)	358 (43.7)	145 (41.2)		112 (81.2)	
Gleason score				0.59		0.001
<7	96 (8.2)	71 (8.7)	25 (7.1)		5 (3.6)	
7	272 (23.2)	186 (22.7)	86 (24.4)		16 (11.6)	
>7	803 (68.6)	562 (68.6)	241 (68.5)		117 (84.8)	
T stage				0.22		0.001
T1	354 (30.2)	235 (28.7)	119 (33.8)		4 (2.9)	
T2	454 (38.8)	320 (39.1)	134 (38.1)		18 (13.0)	
T3	169 (14.4)	127 (15.5)	42 (11.9)		76 (55.1)	
T4	194 (16.6)	137 (16.7)	57 (16.2)		40 (29.0)	
N stage				0.62		0.001
N0	862 (73.6)	599 (73.1)	263 (74.7)		74 (53.6)	
N1	309 (26.4)	220 (26.9)	89 (25.3)		64 (46.4)	
M stage				0.67		0.04
M1a	77 (6.6)	53 (6.5)	24 (6.8)		15 (10.9)	
M1b	798 (68.1)	553 (67.5)	245 (69.6)		98 (71.0)	
M1c	296 (25.3)	213 (26.0)	83 (23.6)		25 (18.1)	
Chemotherapy				0.31		0.15
No/unknown	1,046 (89.3)	737 (90.0)	309 (87.8)		118 (85.5)	
Yes	125 (10.7)	82 (10.0)	43 (12.2)		20 (14.5)	
OS (months)				0.056		0.15
Mean ± SD	52.8±49.8	50.9±48.8	57.1±51.9		45.8±36.7	
Median [IQR]	31.0 [0, 179]	30.0 [0, 179]	35.5 [0, 177]		39.0 [1, 171]	

SEER, Surveillance, Epidemiology, and End Results; D/S/W, divorced/separated/widowed; Others, American Indian/AK Native, Asian/Pacific Islander; PSA, prostate-specific antigen; OS, overall survival; SD, standard deviation; IQR, interquartile range.

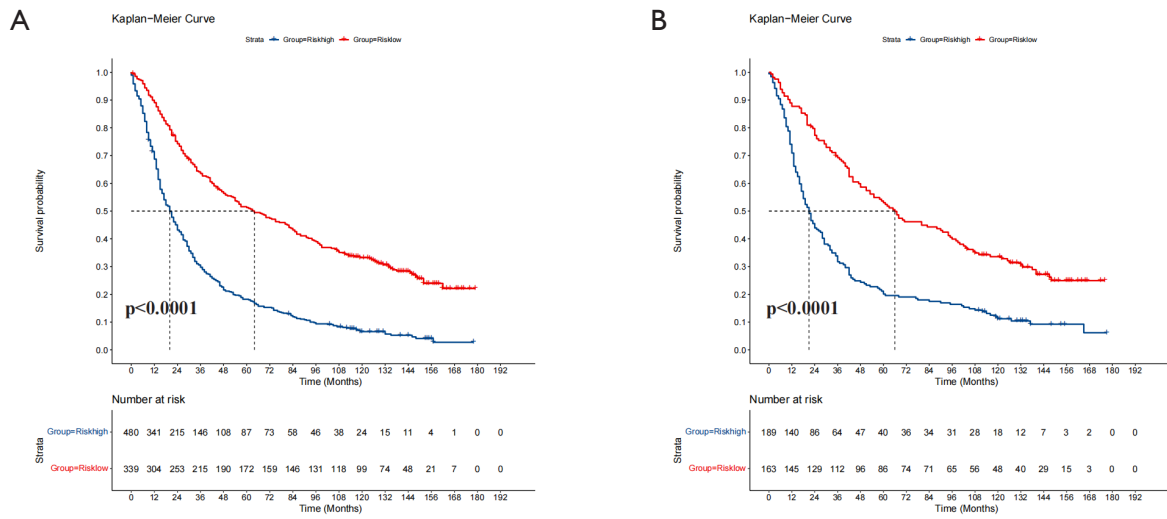


Figure S2 Survival curves stratified by the score calculated by the nomogram. Low-risk group: score ≤ 209 ; high-risk group: score > 209 . (A) Training cohort; (B) validation cohort.