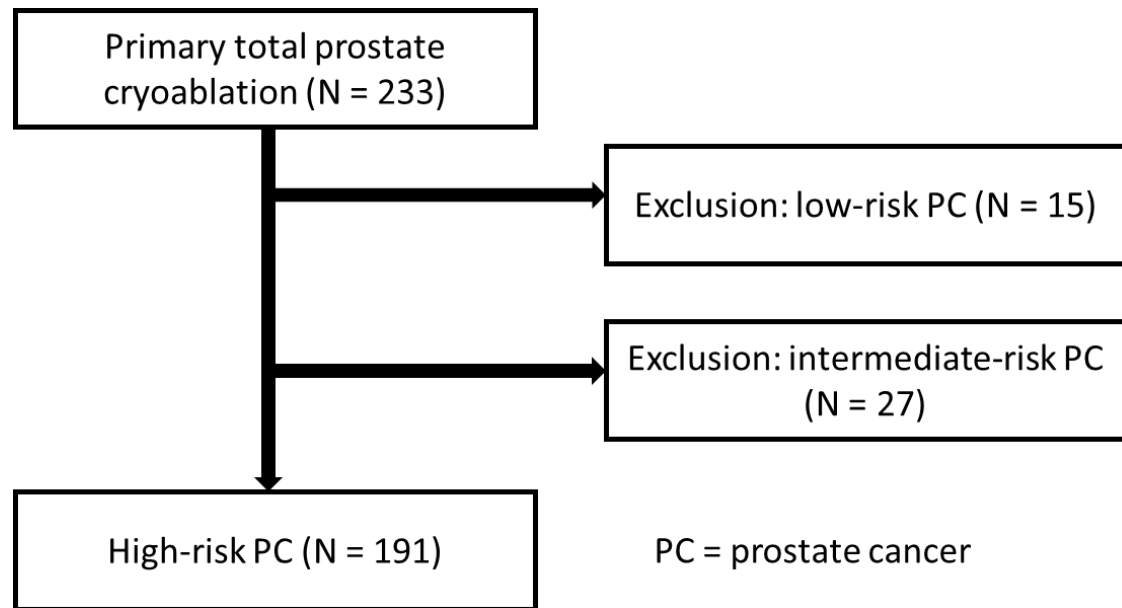


## Supplementary materials

**Supplementary Figure S1.** Flow diagram of patient selection into the study cohort



**Supplementary Table S1.** Demographics and characteristics of the training and validation cohorts

Variables	All		Training cohort		Validation cohort		<i>p</i> value
Patient number (n)	191	100%	153	80.1%	38	19.90%	
Mean age (years, SD)	70.3 (7.5)		70.3 (7.6)		70.3 (7.0)		0.955
Mean PSA at diagnosis (ng/ml, SD)	15.4 (10.1)		15.7 (10.4)		14.2 (8.8)		0.419
PSA at diagnosis (ng/ml)							0.352
<10	77	40.31%	59	38.56%	18	47.37%	
10-20	64	33.51%	55	35.95%	9	23.68%	
>20	50	26.18%	39	25.49%	11	28.95%	
Gleason sum							0.838
~6	35	18.32%	27	17.65%	8	21.05%	
3+4=7	61	31.94%	50	32.68%	11	28.95%	
4+3=7	43	22.51%	33	21.57%	10	26.32%	
8-10	52	27.23%	43	28.10%	9	23.68%	
Clinical T stage							0.916
T1-2	49	25.65%	40	26.14%	9	23.68%	
T3a	80	41.88%	63	41.18%	17	44.74%	
T3b-4	62	32.46%	50	32.68%	12	31.58%	

Visible lesions on MRI							0.758
No	32	16.75%	25	16.34%	7	18.42%	
Yes	159	83.25%	128	83.66%	31	81.58%	
Anterior apical tumor							0.907
No	162	84.82%	130	84.97%	32	84.21%	
Yes	29	15.18%	23	15.03%	6	15.79%	
Neoadjuvant hormonal therapy							0.362
No	88	46.07%	73	47.71%	15	39.47%	
Yes	103	53.93%	80	52.29%	23	60.53%	
Adjuvant hormonal therapy							0.546
No	171	89.53%	138	124.32%	33	41.25%	
Yes	20	10.47%	15	13.51%	5	6.25%	
Prostate volume (median in mL, range)	29.9 (12.4)		30.6 (12.9)		27.1 (9.4)		0.126
Cryoprobe number (median, range)	6.7 (1.0)		6.8 (1.0)		6.6 (1.0)		0.414
PSA nadir value (ng/mL)							0.388
<0.01	87	45.55%	72	47.06%	15	39.47%	
0.01-<0.1	66	34.55%	51	33.33%	15	39.47%	
0.1-<0.5	27	14.14%	23	15.03%	4	10.53%	
0.5~	11	5.76%	7	4.58%	4	10.53%	
Time to PSA nadir (weeks)							0.579
<8	71	37.17%	57	37.25%	14	36.84%	
8-<12	76	39.79%	63	41.18%	13	34.21%	
12~	44	23.04%	33	21.57%	11	28.95%	

**Supplementary Table S2.** The association of PSA nadir value and time to PSA nadir

Time to PSA nadir (months)	PSA nadir value (ng/mL)				<i>p</i> <0.001
	<0.01	0.01~<0.1	0.1~<0.5	0.5 or more	
< 2	17 (23.9%)	26 (36.6%)	21 (29.6%)	7 (9.9%)	
2-< 3	40 (52.6%)	31 (40.8%)	2 (2.6%)	3 (3.9%)	
3 or more	30 (68.2%)	9 (20.5%)	4 (9.1%)	1 (2.3%)	

**Supplementary Table S3.** The association of PSA nadir value and neoadjuvant hormonal therapy

Neoadjuvant hormonal therapy	PSA nadir value (ng/mL)				
	<0.01	0.01~<0.1	0.1~<0.5	0.5 or more	
No	37 (42.1%)	35 (39.8%)	12 (13.6%)	4 (4.6%)	p = 0.538
Yes	50 (48.5%)	31 (30.1%)	15 (15.6%)	7 (6.8%)	
All	86 (45.0%)	67 (35.1%)	27 (14.1%)	11 (5.8%)	

PSA = prostate-specific antigen