

## Appendix 1

### The performance of nomogram in the validation cohort

In accordance with the preceding results, the mean amide proton transfer value (APT<sub>mean</sub>), mean apparent diffusion coefficient value (ADC<sub>mean</sub>), and Prostate Imaging Reporting and Data System (PI-RADS) score of each patient in the validation cohort were acquired by one of two junior radiologists. The clinical and pathological

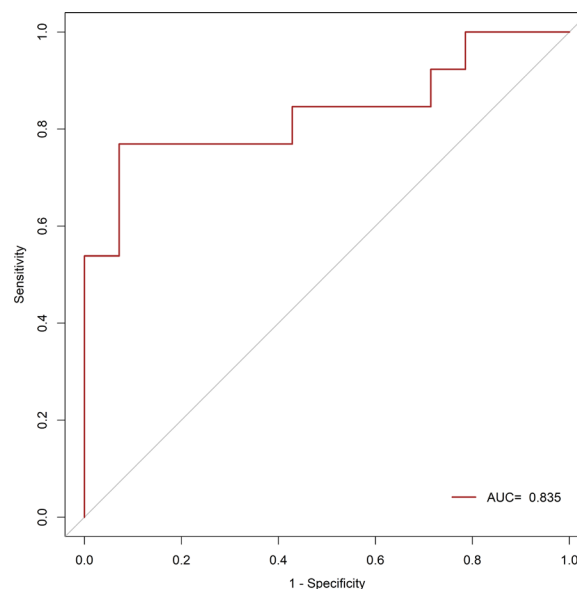
characteristics of these participants are displayed in *Table 1*.

The APT<sub>mean</sub>, ADC<sub>mean</sub>, and PI-RADS scores of the validation cohort were imported into the trained nomogram. The result of receiver operating characteristic (ROC) analysis (*Figure S1*) demonstrated that the nomogram constructed based on PI-RADS score, APT<sub>mean</sub>, and ADC<sub>mean</sub> retained high diagnostic efficacy (area under the ROC curve: 0.835) in the validation cohort.

**Table S1** Parameters of the MR sequences

Parameters	T2WI	DWI	DCE	APT
TR (ms)	3,280	3,623	4	2,100
TE (ms)	102	97.2	1.8	18.4
Slice-thickness/gap (mm)	4/1	4/1	4/none	5/none
NEX	2	1 (for T2)	1	1
Matrix	288×256	128×64	256×192	128×128
FOV (mm <sup>2</sup> )	220×220	220×220	360×360	340×340
Acquisition time (min)	2.02	6.40	6.10	5.28

The b values of DWI were 0, 1,400, 2,000, and 3,000. MR, magnetic resonance; T2WI, T2-weighted imaging; DWI, diffusion-weighted imaging; DCE, dynamic contrast-enhanced; APT, amide proton transfer; TR, time of repetition; TE, time to echo; NEX, number of excitations; FOV, field of view.



**Figure S1** ROC analysis of the nomogram in differentiating csPCa. ROC, receiver operating characteristic; AUC, area under the ROC curve; csPCa, clinically significant prostate cancer.