

S1 Table. Comparison of the diagnostic accuracy between bpMRI and mpMRI

Reference	Diagnostic test	Reference standard	Scoring system	Any PCa				csPCa (GS \geq 7(3+4))			
				Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)
This study	bpMRI	TPB (FTB and FSB)	PI-RADS \geq 3	92.1	19.7	51.5	72.9	95.1	17.8	32.9	89.6
			PI-RADS \geq 4	73.3	75.3	73.3	75.3	80.4	65.6	49.7	88.8
Thompson et al. [1]	mpMRI	TPB (TB and SB)	PI-RADS \geq 3	88	41	71	67	96	63	52	92
			PI-RADS \geq 4	53	90	90	53	68	86	78	79
Ahmed et al. [2]	mpMRI	TPB (mapping SB)	Likert \geq 3	88	45	65	76	93	41	51	89

bpMRI, bi-parametric magnetic resonance imaging; mpMRI, multi-parametric magnetic resonance imaging; PCa, prostate cancer; csPCa, clinically significant prostate cancer; PPV, positive predictive value; NPV, negative predictive value; TPB, transperineal biopsy; FTB, fusion transperineal targeted biopsy; FSB, fusion template systematic biopsy; PI-RADS, Prostate Imaging-Reporting and Data System; TB; targeted biopsy, SB; systematic biopsy.

References

1. Thompson JE, van Leeuwen PJ, Moses D, Shnier R, Brenner P, Delprado W, et al. The diagnostic performance of multiparametric magnetic resonance imaging to detect significant prostate cancer. *J Urol.* 2016;195:1428-35.
2. Ahmed HU, El-Shater Bosaily A, Brown LC, Gabe R, Kaplan R, Parmar MK, et al. Diagnostic accuracy of multi-parametric MRI and TRUS biopsy in prostate cancer (PROMIS): a paired validating confirmatory study. *Lancet.* 2017;389:815-22.