

**S1 Table:** Detailed histopathological results of false-negative and false-positive lesions

	<b>Imaging modality</b>	<b>False positives</b>	<b><i>n</i></b>	<b>False negatives</b>	<b><i>n</i></b>
<b>Single parameter</b>	<b>T2w<sup>1</sup></b>	3 Prostatitis	<b>7</b>	1 GS 6 (3+3)	<b>2</b>
		4 BPH <sup>6</sup>		1 GS 8 (4+4)	
	<b>DWI<sup>2</sup></b>	4 Prostatitis	<b>9</b>	1 GS 6 (3+3)	<b>2</b>
		5 BPH		1 GS 8 (4+4)	
	<b>3D <sup>1</sup>H-MRSI<sup>3</sup></b>	4 Prostatitis	<b>7</b>	8 GS 6 (3+3)	<b>14</b>
		3 BPH		5 GS 7 (4+3)	
				1 GS 8 (4+4)	
	<b>DCE<sup>4</sup></b>	4 Prostatitis	<b>7</b>	5 GS 6 (3+3)	<b>9</b>
		3 BPH		3 GS 7 (4+3)	
				1 GS 8 (4+4)	
	<b>PET<sup>5</sup></b>	5 Prostatitis	<b>11</b>	4 GS 6 (3+3)	<b>9</b>
		6 BPH		4 GS 7 (4+3)	
		1 GS 8 (4+4)			
<b>Two parameters</b>	<b>T2w and DWI</b>	3 Prostatitis	<b>5</b>	1 GS 6 (3+3)	<b>2</b>
		2 BPH		1 GS 8 (4+4)	
	<b>T2w and <sup>1</sup>H-MRSI</b>	2 Prostatitis	<b>5</b>	8 GS 6 (3+3)	<b>14</b>
		3 BPH		5 GS 7 (4+3)	
				1 GS 8 (4+4)	
	<b>T2w and DCE</b>	2 Prostatitis	<b>4</b>	4 GS 6 (3+3)	<b>9</b>
		2 BPH		4 GS 7 (4+3)	
				1 GS 8 (4+4)	
<b>T2w and PET</b>	3 Prostatitis	<b>5</b>	6 GS 6 (3+3)	<b>11</b>	
			4 GS 7 (4+3)		

		2 BPH		1 GS 8 (4+4)	
<b>Three parameters</b>	<b>T2w, DWI and <sup>1</sup>H-MRSI</b>	3 Prostatitis	<b>6</b>	1 GS 6 (3+3)	<b>2</b>
		3 BPH		1 GS 8 (4+4)	
	<b>T2w, DWI and DCE</b>	3 Prostatitis	<b>7</b>	1 GS 6 (3+3)	<b>2</b>
		4 BPH		1 GS 8 (4+4)	
	<b>T2w, DWI and PET</b>	4 Prostatitis	<b>9</b>	1 GS 6 (3+3)	<b>2</b>
		5 BPH		1 GS 8 (4+4)	
<b>Four parameters</b>	<b>T2w, DWI, <sup>1</sup>H-MRSI and DCE</b>	3 Prostatitis	<b>7</b>	1 GS 6 (3+3)	<b>2</b>
		4 BPH		1 GS 8 (4+4)	
	<b>T2w, DWI, <sup>1</sup>H-MRSI and PET</b>	4 Prostatitis	<b>8</b>	1 GS 6 (3+3)	<b>2</b>
		4 BPH		1 GS 8 (4+4)	
	<b>T2w, DWI, DCE and PET</b>	3 Prostatitis	<b>7</b>	1 GS 6 (3+3)	<b>2</b>
		4 BPH		1 GS 8 (4+4)	
<b>MP [<sup>11</sup>C]Acetate PET-MRI</b>	<b>T2w, DWI, <sup>1</sup>H-MRSI, DCE and PET</b>	3 Prostatitis	<b>7</b>	2 GS 6 (3+3)	<b>4</b>
				1 GS 7 (4+3)	
		4 BPH		1 GS 8 (4+4)	

<sup>1</sup> T2-weighted MRI

<sup>2</sup> diffusion-weighted imaging

<sup>3</sup> three-dimensional proton MR spectroscopic imaging

<sup>4</sup> dynamic contrast-enhanced MRI

<sup>5</sup> positron emission tomography

<sup>6</sup> benign prostatic hyperplasia