

TABLE E-1 Comparison of Magnetic Resonance Imaging (MRI) Report and Preoperative Diagnosis

Lesion	Measure	MRI report	95% Confidence Intervals	Preoperative diagnosis	95% Confidence Intervals
Anterior cruciate ligament	Sensitivity	74.4	59.0-86.2	100.0	92.6-100
	Specificity	100.0	94.9-100	100.0	94.9-100
	PPV	100.0	90.2-100	100.0	92.6-100
	NPV	86.4	75.0-92.2	100.0	94.9-100
Lateral meniscus	Sensitivity	88.9	72.7-97.1	96.3	83.1-99.8
	Specificity	87.0	77.4-93.8	97.1	90.3-99.5
	PPV	72.7	55.8-85.8	92.9	78.4-98.8
	NPV	95.1	87.6-98.8	98.5	93.0-99.9
Medial meniscus	Sensitivity	94.4	75.5-99.7	94.4	75.5-99.7
	Specificity	91.0	83.1-96.0	97.4	91.6-99.6
	PPV	70.8	50.6-86.3	89.5	69.4-98.2
	NPV	98.6	93.3-99.9	98.7	93.6-99.9
Osteochondritis dissecans	Sensitivity	77.8	54.7-92.5	94.4	75.5-99.7
	Specificity	94.9	88.1-98.4	100.0	96.2-100
	PPV	77.8	54.7-92.5	100.0	83.8-100
	NPV	94.9	88.1-98.4	98.7	93.9-99.9
Discoid lateral meniscus	Sensitivity	40.0	14.3-70.9	100.0	74.1-100.0
	Specificity	97.7	92.5-99.6	100.0	96.6-100.0
	PPV	66.7	26.2-94.0	100.0	74.1-100.0
	NPV	93.3	86.7-97.3	100.0	96.6-100.0
Osteochondral fracture	Sensitivity	66.7	26.3-94.0	100.0	60.7-100.0
	Specificity	100.0	96.7-100.0	100.0	96.7-100.0
	PPV	100.0	47.3-100.0	100.0	60.7-100.0
	NPV	97.8	93.0-99.6	100.0	96.7-100.0

NPV: Negative predictive value; PPV: Positive predictive value.

TABLE E-2 Kappa Values

	MRI report	95% CI	Preoperative diagnosis	95% CI	
Anterior cruciate ligament tear	0.78	(0.65 – 0.90)	1.00	(0.92 – 1.00)	p = 0.001
Medial meniscal tear	0.76	(0.60 – 0.92)	0.90	(0.79 – 1.00)	p = 0.070
Lateral meniscal tear	0.71	(0.56 – 0.86)	0.92	(0.84 – 1.00)	p = 0.004
Discoid lateral meniscus	0.46	(0.14 – 0.77)	1.00	(0.81 – 1.00)	p = 0.001
Osteochondritis dissecans	0.70	(0.55 – 0.91)	0.93	(0.90 – 1.00)	p = 0.005
Osteochondral fracture	0.65	(0.51 – 1.00)	0.90	(0.71 – 1.00)	p = 0.132

CI: Confidence interval; MRI: Magnetic resonance imaging.

TABLE E-3 Study Comparison with Reports by Kocher et al.¹¹ and Stanitski¹²

					Stanitski			Kocher et al.	
		Surgeon diagnosis	MRI		Clinical diagnosis	MRI		Clinical diagnosis	MRI
Anterior cruciate ligament	PPV	100	100		100	100		49	58.6
	NPV	100	86.4		94.1	84.2		97.8	97.1
	Sensitivity	100	74.4		91.7	75		81.3	75
	Specificity	100	100		100	100		90.6	94.1
Menisci (all)	PPV	91.5	73.6		93.3	37.5			
	NPV	98.6	93		92.3	50			
	Sensitivity	95.6	92.9		93.3	50			
	Specificity	97.3	74.1		92.3	45.5			
Medial meniscus	PPV	89.5	70.8					14.5	34.3
	NPV	98.7	98.6					97.6	98.8
	Sensitivity	94.4	91					62.1	79.3
	Specificity	97.4	91					80.7	92
Lateral meniscus	PPV	92.9	72.7					34	30.1
	NPV	98.5	95.1					94.1	95.7
	Sensitivity	96.3	88.9					50	66.7
	Specificity	97.1	87					89.2	82.8
Osteochondritis dissecans	PPV	100	77.8					66	69.5
	NPV	98.7	94.9					98.8	99.5
	Sensitivity	94.4	77.8					77.3	90.9
	Specificity	100	94.9					97.9	97.9
Discoid lateral meniscus	PPV	100	66.7					31	100
	NPV	100	93.3					99.9	99.4
	Sensitivity	100	40					88.9	38.9
	Specificity	100	97.7					98	100

NPV: Negative predictive value; PPV: Positive predictive value; MRI: Magnetic resonance imaging.