

Supplementary Table S1: Results of the contingency table analysis. SE = sensitivity, SP = specificity, PPV = positive predictive value, NPV = negative predictive value. In brackets 95% CI = 95% confidence interval of the difference. + synovitis / tenosynovitis positive, - synovitis / tenosynovitis negative.

Patient level							Joint/Tendon level						
	MSUS +	MSUS -						MSUS +	MSUS -				
80 kVp +	26	3	SE	0.93 (0.77 – 0.99)	PPV	0.90 (0.74 – 0.96)	80 kVp +	90	54	SE	0.58 (0.50 – 0.66)	PPV	0.63 (0.54 – 0.70)
80 kVp -	2	2	SP	0.4 (0.07 – 0.77)	NPV	0.5 (0.09 – 0.91)	80 kVp -	65	484	SP	0.90 (0.87 – 0.92)	NPV	0.88 (0.85 – 0.90)
135 kVp +	22	0	SE	0.79 (0.60 – 0.90)	PPV	1.0 (0.85 – 1.0)	135 kVp +	78	27	SE	0.50 (0.43 – 0.58)	PPV	0.74 (0.65 – 0.82)
135 kVp -	6	5	SP	1.0 (0.57 – 1.00)	NPV	0.45 (0.21 – 0.72)	135 kVp -	77	511	SP	0.95 (0.93 – 0.97)	NPV	0.87 (0.84 – 0.89)
50 keV +	24	2	SE	0.86 (0.69 – 0.94)	PPV	0.92 (0.76 – 0.99)	50 keV +	79	35	SE	0.51 (0.43 – 0.59)	PPV	0.69 (0.60 – 0.77)
50 keV -	4	3	SP	0.6 (0.23 – 0.93)	NPV	0.43 (0.16 – 0.75)	50 keV -	76	503	SP	0.93 (0.91 – 0.95)	NPV	0.87 (0.84 – 0.89)
70 keV +	27	3	SE	0.96 (0.83 – 0.99)	PPV	0.9 (0.74 – 0.97)	70 keV +	94	56	SE	0.61 (0.53 – 0.68)	PPV	0.63 (0.55 – 0.70)
70 keV -	1	2	SP	0.4 (0.07 – 0.77)	NPV	0.67 (0.12 – 0.98)	70 keV -	61	482	SP	0.90 (0.87 – 0.92)	NPV	0.89 (0.86 – 0.91)
Joint level							Tendon level						
	MSUS +	MSUS -						MSUS +	MSUS -				
80 kVp +	65	27	SE	0.56 (0.47 – 0.64)	PPV	0.71 (0.61 – 0.79)	80 kVp +	25	27	SE	0.66 (0.50 – 0.79)	PPV	0.48 (0.35 – 0.61)
80 kVp -	52	219	SP	0.89 (0.85 – 0.92)	NPV	0.81 (0.76 – 0.85)	80 kVp -	13	265	SP	0.91 (0.87 – 0.94)	NPV	0.95 (0.92 – 0.97)
135 kVp +	55	13	SE	0.47 (0.38 – 0.56)	PPV	0.81 (0.70 – 0.88)	135 kVp +	23	14	SE	0.61 (0.45 – 0.74)	PPV	0.62 (0.46 – 0.76)
135 kVp -	62	233	SP	0.95 (0.91 – 0.97)	NPV	0.79 (0.74 – 0.83)	135 kVp -	15	278	SP	0.95 (0.92 – 0.97)	NPV	0.95 (0.92 – 0.97)
50 keV +	59	25	SE	0.50 (0.42 – 0.59)	PPV	0.70 (0.60 – 0.79)	50 keV +	20	10	SE	0.53 (0.37 – 0.68)	PPV	0.67 (0.49 – 0.81)
50 keV -	58	221	SP	0.90 (0.85 – 0.93)	NPV	0.79 (0.74 – 0.84)	50 keV -	18	282	SP	0.97 (0.94 – 0.98)	NPV	0.94 (0.91 – 0.96)
70 keV +	72	35	SE	0.62 (0.52 – 0.70)	PPV	0.67 (0.58 – 0.75)	70 keV +	22	21	SE	0.58 (0.42 – 0.72)	PPV	0.51 (0.37 – 0.65)
70 keV -	45	211	SP	0.86 (0.81 – 0.90)	NPV	0.82 (0.77 – 0.87)	70 keV -	16	271	SP	0.93 (0.89 – 0.95)	NPV	0.94 (0.91 – 0.97)