

Online-Only Supplement: Calculation of sensitivity, specificity, LR+ and LR- for each imaging feature in each study.

In the table headings: n refers to total in study; [True pos, False pos, True neg, False neg] refers to the number of individuals who are true positive, false positive, true negative and false negative respectively; 95% CI denotes 95% confidence interval; and [LR+, LR-] indicates the likelihood ratio associated with a positive test and a negative test, respectively.

Anatomical category	Location	Comparator	Modality	Study ID	n	True pos	False pos	True neg	False neg	Sensitivity	95% CI	Specificity	95% CI	LR+	95% CI	LR-	95% CI
Bursitis	Cervical interspinous	All	MRI	Salvarani 2008	25	10	4	9	2	0.83	0.55 to 0.95	0.69	0.42 to 0.87	2.7	1.2 to 6.4	0.2	0.1 to 0.9
Bursitis	Cervical interspinous	Non PMR/RA	PET/CT	Camellino 2014	130	6.5	0.5	65.5	59.5	0.10	0.05 to 0.19	0.99	0.93 to 1.00	13.0	0.75 to 226	0.9	0.8 to 1.0
Bursitis	Cervical interspinous	RA	PET/CT	Camellino 2014	75	6.5	0.5	10.5	59.5	0.10	0.05 to 0.19	0.95	0.68 to 1.00	2.2	0.1 to 35.8	0.9	0.8 to 1.1
Bursitis	Lumbar interspinous	All	MRI	Salvarani 2013	21	6	1	10	4	0.60	0.31 to 0.83	0.91	0.62 to 0.98	6.6	1.0 to 45.7	0.4	0.2 to 1.0
Bursitis	Lumbar interspinous	Non PMR/RA	PET/CT	Camellino 2014	130	30.5	0.5	65.5	35.5	0.46	0.35 to 0.58	0.99	0.93 to 1.00	61	3.8 to 977	0.5	0.4 to 0.7
Bursitis	Lumbar interspinous	RA	PET/CT	Camellino 2014	75	30	1	9	35	0.46	0.34 to 0.58	0.90	0.60 to 0.98	4.6	0.7 to 30.0	0.6	0.4 to 0.8
Bursitis	Spine	All	PET/CT	Yamashita 2012	31	11	3	14	3	0.79	0.52 to 0.92	0.82	0.59 to 0.94	4.5	1.5 to 12.9	0.3	0.1 to 0.7
Bursitis	Iliopsoas	All	MRI	Cantini 2005	30	10	2	8	10	0.50	0.30 to 0.70	0.80	0.49 to 0.94	2.5	0.7 to 9.3	0.6	0.4 to 1.1
Bursitis	Iliopsoas	All	Ultrasound	Cantini 2005	60	6	4	36	14	0.30	0.15 to 0.52	0.90	0.77 to 0.96	3.0	1.0 to 9.4	0.8	0.6 to 1.1

Bursitis	Iliopectineal (=iliopsoas)	RA	PET/CT	Takahashi 2014	37	16	1	9	11	0.59	0.41 to 0.75	0.60 to 0.90	5.9	0.9 to 39	0.5	0.3 to 0.7
Bursitis	Ischiogluteal	All	MRI	Cantini 2005	30	5	1	9	15	0.25	0.11 to 0.47	0.60 to 0.90	2.5	0.3 to 18.6	0.8	0.6 to 1.2
Bursitis	Ischiogluteal	All	PET/CT	Yamashita 2012	31	12	4	13	2	0.86	0.60 to 0.96	0.53 to 0.76	3.6	1.5 to 8.8	0.2	0.1 to 0.7
Bursitis	Ischiogluteal	All	Ultrasound	Cantini 2005	60	4	2	38	16	0.20	0.08 to 0.42	0.84 to 0.95	4.0	0.80 to 20.0	0.8	0.7 to 1.1
Bursitis	Subacromial bursitis	RA	MRI	Salvarani 1997	24	13.5	2.5	7.5	0.5	0.96	0.73 to 1.00	0.44 to 0.75	3.9	1.3 to 11.3	0.05	0.00 to 0.7
Bursitis	Subacromial-subdeltoid bursitis	All	Ultrasound	Cantini 2001	171	55	25	89	2	0.96	0.88 to 0.99	0.70 to 0.78	4.4	3.1 to 6.2	0.05	0.01 to 0.2
Bursitis	Subacromial-subdeltoid bursitis	All	Ultrasound	Dasgupta 2012	272	67	53	100	52	0.56	0.47 to 0.65	0.58 to 0.65	1.6	1.2 to 2.1	0.7	0.5 to 0.8
Bursitis	Subacromial-subdeltoid bursitis	All	Ultrasound	Falsetti 2011	61	23	13	19	6	0.79	0.62 to 0.90	0.42 to 0.59	2.0	1.2 to 3.1	0.3	0.2 to 0.8
Bursitis	Subacromial-subdeltoid bursitis	All	Ultrasound	Falsetti/Frediani 2002	150	35	39	61	15	0.70	0.56 to 0.81	0.51 to 0.61	1.8	1.3 to 2.4	0.5	0.3 to 0.8
Bursitis	Subacromial-subdeltoid bursitis	Non inflammatory shoulder pain	Ultrasound	Dasgupta 2012	165	67	14	32	52	0.56	0.47 to 0.65	0.55 to 0.70	1.8	1.2 to 2.9	0.6	0.5 to 0.8
Bursitis	Subacromial-subdeltoid bursitis	Non inflammatory shoulder pain	Ultrasound	Ruta 2012	120	33	15	45	27	0.55	0.42 to 0.67	0.63 to 0.75	2.2	1.3 to 3.6	0.6	0.4 to 0.8

Bursitis	Subacromial-subdeltoid bursitis	RA	Ultrasound	Coari 1999	154	3	12	110	29	0.09	0.03 to 0.24	0.84 to 0.90	1.0	0.3 to 3.2	0.9 to 1.1
Bursitis	Subacromial-subdeltoid bursitis	RA	Ultrasound	Dasgupta 2012	165	67	13	33	52	0.56	0.47 to 0.65	0.57 to 0.72	2.0	1.2 to 3.2	0.5 to 0.8
Bursitis	Subacromial-subdeltoid bursitis	RA	Ultrasound	Ruta 2012	60	22	10	20	8	0.73	0.56 to 0.86	0.49 to 0.67	2.2	1.3 to 3.8	0.2 to 0.8
Bursitis	Subacromial-subdeltoid bursitis, bilateral	All	Ultrasound	Cantini 2001	171	53	1	113	4	0.93	0.83 to 0.97	0.95 to 1.00	106	15 to 747	0.03 to 0.2
Bursitis	Subacromial-subdeltoid bursitis, bilateral	All	Ultrasound	Dasgupta 2012	272	38	19	134	81	0.32	0.24 to 0.41	0.81 to 0.88	2.6	1.6 to 4.2	0.7 to 0.9
Bursitis	Subacromial-subdeltoid bursitis, bilateral	All	Ultrasound	Falsetti 2011	61	20	7	25	9	0.69	0.51 to 0.83	0.61 to 0.89	3.2	1.6 to 6.3	0.2 to 0.7
Bursitis	Subacromial-subdeltoid bursitis, bilateral	All	Ultrasound	Falsetti/Frediani 2002	150	27	32	68	23	0.54	0.40 to 0.67	0.58 to 0.76	1.7	1.2 to 2.5	0.5 to 0.9
Bursitis	Subacromial-subdeltoid bursitis, bilateral	RA	Ultrasound	Dasgupta 2012	165	38	10	36	81	0.32	0.24 to 0.41	0.64 to 0.88	1.5	0.8 to 2.7	0.7 to 1.1
Bursitis	Subacromial-subdeltoid bursitis, bilateral	RA	Ultrasound	Ruta 2012	60	11	1	29	19	0.37	0.22 to 0.54	0.83 to 0.99	11	1.5 to 80	0.5 to 0.9
Bursitis	Trochanteric	All	MRI	Cantini 2005	32	20.5	2.5	8.5	0.5	0.98	0.81 to	0.77	0.48 to	4.3	1.4 to
														0.03 2 to	0.00

Bursitis	Trochanteric	All	PET/CT	Yamashita 2012	31	10	2	15	4	0.71	0.45 to 0.88	0.66 to 0.88	0.93	1.6 to 6.1	13 to 0.3	0.5 to 0.8
Bursitis	Trochanteric	All	Ultrasound	Cantini 2005	62	20.5	12.5	28.5	0.5	1.00	0.84 to 1.00	0.55 to 0.82	0.70	2.1 to 3.3	0.0 to 5.4	0.00 to 0.5
Bursitis	Trochanteric	All	Ultrasound	Dasgupta 2012	226	23	11	107	85	0.21	0.15 to 0.30	0.84 to 0.95	0.91	1.2 to 2.3	0.8 to 2.3	0.8 to 1.0
Extracapsular	Hand	RA	MRI	Marzo 1997	20	8	2	8	2	0.80	0.49 to 0.94	0.49 to 0.94	0.80	4.0 to 4.0	1.1 to 14	0.07 to 0.9
Extracapsular	Shoulder	RA	MRI	McGonagle 2001	28	9	2	12	5	0.64	0.39 to 0.84	0.60 to 0.96	0.86	4.5 to 4.5	1.2 to 17	0.2 to 0.9
Region	Hip	Non inflammatory shoulder pain	Ultrasound	Dasgupta 2012	167	46	8	39	74	0.38	0.30 to 0.47	0.70 to 0.91	0.83	2.3 to 4.4	1.2 to 0.7	0.6 to 0.9
Region	Hip	RA	Ultrasound	Dasgupta 2012	166	46	14	32	74	0.38	0.30 to 0.47	0.55 to 0.81	0.70	1.3 to 1.3	0.8 to 2.1	0.7 to 1.1
Region	Shoulder	All	PET/CT	Yamashita 2012	31	12	12	5	2	0.86	0.60 to 0.96	0.13 to 0.53	0.29	1.2 to 1.8	0.8 to 1.8	0.1 to 2.1
Region	Shoulder and hip	All	Ultrasound	Dasgupta 2012	274	40	25	129	80	0.33	0.26 to 0.42	0.77 to 0.89	0.84	2.1 to 3.2	1.3 to 3.2	0.7 to 0.9
Region	Shoulder and hip	All	Ultrasound	Macchioni 2013	285	65	21	71	128	0.34	0.27 to 0.41	0.68 to 0.85	0.77	1.5 to 2.3	0.97 to 0.9	0.7 to 1.0
Region	Shoulder, bilateral	All	Ultrasound	Dasgupta 2012	274	71	66	88	49	0.59	0.50 to 0.68	0.49 to 0.65	0.57	1.4 to 1.7	1.1 to 1.7	0.6 to 0.9

Region	Shoulder, bilateral	All	Ultrasound	Macchioni 2013	285	104	21	32	128	0.45	0.39 to 0.51	0.60	0.47 to 0.72	1.1	0.79 to 1.6	0.9	0.7 to 1.2
Region	Shoulder, bilateral	Non inflammatory shoulder pain	Ultrasound	Dasgupta 2012	167	71	12	35	49	0.59	0.50 to 0.68	0.74	0.60 to 0.85	2.3	1.4 to 3.9	0.5	0.4 to 0.7
Region	Shoulder, bilateral	RA	Ultrasound	Dasgupta 2012	166	71	30	16	49	0.59	0.50 to 0.68	0.35 to 0.49	0.23 to 0.49	0.9	0.7 to 1.2	1.2	0.7 to 1.8
Region	Shoulder, bilateral	RA	Ultrasound	Macchioni 2013	230	104	11	32	83	0.56	0.48 to 0.63	0.74	0.60 to 0.85	2.2	1.3 to 3.7	0.6	0.5 to 0.8
Synovitis	Glenohumeral	RA	MRI	Salvarani 1997	22	10	5	4	3	0.77	0.50 to 0.92	0.44 to 0.73	0.19 to 0.73	1.4	0.7 to 2.7	0.5	0.2 to 1.8
Synovitis	Glenohumeral	All	Ultrasound	Cantini 2001	171	44	66	48	13	0.77	0.65 to 0.86	0.42	0.33 to 0.51	1.3	1.1 to 1.6	0.5	0.3 to 0.9
Synovitis	Glenohumeral	All	Ultrasound	Dasgupta 2012	272	46	44	109	73	0.39	0.30 to 0.48	0.71	0.64 to 0.78	1.3	1.0 to 1.9	0.9	0.7 to 1.0
Synovitis	Glenohumeral	All	Ultrasound	Falsetti 2011	61	19	17	15	10	0.66	0.47 to 0.80	0.47	0.31 to 0.64	1.2	0.8 to 1.9	0.7	0.4 to 1.4
Synovitis	Glenohumeral	All	Ultrasound	Falsetti/Frediani 2002	150	33	35	65	17	0.66	0.52 to 0.78	0.65	0.55 to 0.74	1.9	1.4 to 2.6	0.5	0.3 to 0.8
Synovitis	Glenohumeral	Non inflammatory shoulder pain	Ultrasound	Coari 1999	154	21	28	94	11	0.66	0.48 to 0.80	0.77	0.69 to 0.84	2.9	1.9 to 4.3	0.4	0.3 to 0.7
Synovitis	Glenohumeral	Non inflammatory shoulder	Ultrasound	Dasgupta 2012	165	46	11	35	73	0.39	0.30 to 0.48	0.76	0.62 to 0.86	1.6	0.9 to 2.8	0.8	0.7 to 1.0

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Synovitis	Glenohumeral	Non inflammatory shoulder pain	Ultrasound	Ruta 2012	120	7	4	56	53	0.12	0.06 to 0.22	0.93 to 0.97	0.84 to 0.97	1.8 to 5.7	0.5 to 0.9	0.8 to 1.1
Synovitis	Glenohumeral	RA	Ultrasound	Coari 1999	122	21	43	47	11	0.66	0.48 to 0.80	0.52 to 0.62	0.42 to 0.62	1.4 to 1.9	1.0 to 1.9	0.7 to 1.1
Synovitis	Glenohumeral	RA	Ultrasound	Dasgupta 2012	165	46	17	29	73	0.39	0.30 to 0.48	0.63 to 0.75	0.49 to 0.75	1.0 to 1.6	0.7 to 1.0	0.7 to 1.3
Synovitis	Glenohumeral	RA	Ultrasound	Lange 2000	51	9	19	10	13	0.41	0.23 to 0.61	0.34 to 0.53	0.20 to 0.53	0.6 to 1.1	0.4 to 1.1	0.9 to 3.2
Synovitis	Glenohumeral	RA	Ultrasound	Ruta 2012	60	6	13	17	24	0.20	0.10 to 0.37	0.57 to 0.73	0.39 to 0.73	0.5 to 1.1	0.2 to 1.1	1.0 to 2.0
Synovitis	Glenohumeral, bilateral	All	Ultrasound	Dasgupta 2012	272	31	26	127	88	0.26	0.19 to 0.35	0.83 to 0.88	0.76 to 0.88	1.5 to 2.4	1.0 to 0.9	0.8 to 1.0
Synovitis	Glenohumeral, bilateral	All	Ultrasound	Falsetti 2011	61	14	11	21	15	0.48	0.31 to 0.66	0.66 to 0.80	0.48 to 0.80	1.4 to 2.6	0.8 to 0.8	0.5 to 1.2
Synovitis	Glenohumeral, bilateral	All	Ultrasound	Falsetti/Frediani 2002	150	26	22	78	24	0.52	0.39 to 0.65	0.78 to 0.85	0.69 to 0.85	2.4 to 3.7	1.5 to 0.6	0.5 to 0.8
Synovitis	Glenohumeral, bilateral	RA	Ultrasound	Dasgupta 2012	165	31	14	32	88	0.26	0.19 to 0.35	0.70 to 0.81	0.55 to 0.81	0.9 to 1.5	0.5 to 1.1	0.9 to 1.3
Synovitis	Glenohumeral, bilateral	RA	Ultrasound	Ruta 2012	60	1	3	27	29	0.03	0.01 to 0.17	0.90 to 0.97	0.74 to 0.97	0.3 to 0.3	0.0 to 4 to 3.0	0.9 to 1.1 to 1.2
Synovitis	Hip	All	MRI	Cantini 2005	30	17	5	5	3	0.85	0.64 to 0.95	0.50 to 0.76	0.24 to 0.76	1.7 to 3.2	0.9 to 3.2	0.1 to 1.0

Synovitis	Hip	All	PET/CT	Yamashita 2012	31	12	6	11	2	0.86	0.60 to 0.96	0.41 to 0.65	1.2 to 2.4	0.1 to 0.8
Synovitis	Hip	All	Ultrasound	Cantini 2005	60	9	18	22	11	0.45	0.26 to 0.66	0.40 to 0.55	0.6 to 1.0	0.6 to 1.6
Synovitis	Hip	All	Ultrasound	Dasgupta 2012	224	28	22	96	78	0.26	0.19 to 0.36	0.73 to 0.81	0.9 to 1.4	0.8 to 2.3
Synovitis	Hip	All	Ultrasound	Falsetti 2011	61	7	4	28	22	0.24	0.12 to 0.42	0.72 to 0.88	0.6 to 1.9	0.7 to 5.9
Synovitis	Hip	All	Ultrasound	Falsetti/Frediani 2002	150	20	19	81	30	0.40	0.28 to 0.54	0.72 to 0.81	1.2 to 2.1	0.6 to 3.6
Synovitis	Hip, bilateral	All	Ultrasound	Dasgupta 2012	224	19	10	108	87	0.18	0.12 to 0.26	0.85 to 0.92	1.0 to 2.1	0.8 to 4.3
Synovitis	Hip, bilateral	All	Ultrasound	Falsetti/Frediani 2002	150	16	17	83	34	0.32	0.21 to 0.46	0.74 to 0.83	1.0 to 1.9	0.7 to 3.4
Tenosynovitis	Extensor tendons hands	All	MRI	Cimmino 2011	28	10	4	9	5	0.67	0.42 to 0.85	0.42 to 0.69	0.9 to 2.2	0.2 to 5.3
Tenosynovitis	Long head biceps tendon	RA	MRI	Salvarani 1997	24	7	3	6	8	0.47	0.25 to 0.70	0.35 to 0.67	0.5 to 1.4	0.4 to 4.1
Tenosynovitis	Long head biceps tendon	All	Ultrasound	Cantini 2001	171	46	60	54	11	0.81	0.69 to 0.89	0.38 to 0.47	1.2 to 1.5	0.2 to 0.7
Tenosynovitis	Long head biceps tendon	All	Ultrasound	Dasgupta 2012	271	78	71	82	40	0.66	0.57 to 0.74	0.46 to 0.54	1.2 to 1.4	0.5 to 1.8
Tenosynovitis	Long head biceps tendon	All	Ultrasound	Falsetti/Frediani 2002	150	34	41	59	16	0.68	0.54 to 0.59	0.49 to 0.59	1.2 to 1.7	0.4 to 0.5

Tenosynovitis	Long head biceps tendon	Non inflammatory shoulder pain	Ultrasound	Coari 1999	154	5	67	55	27	0.16	0.07 to 0.32	0.37 to 0.45	0.3	0.1 to 0.6	1.9 to 2.4	2.2	0.8
Tenosynovitis	Long head biceps tendon	Non inflammatory shoulder pain	Ultrasound	Dasgupta 2012	165	78	19	28	40	0.66	0.57 to 0.71	0.45 to 0.60	1.6	1.1 to 2.4	0.6	0.4 to 0.8	
Tenosynovitis	Long head biceps tendon	Non inflammatory shoulder pain	Ultrasound	Ruta 2012	120	28	12	48	32	0.47	0.35 to 0.59	0.68 to 0.80	2.3	1.3 to 4.1	0.7	0.5 to 0.9	
Tenosynovitis	Long head biceps tendon	RA	Ultrasound	Coari 1999	122	5	47	43	27	0.16	0.07 to 0.32	0.38 to 0.48	0.3	0.1 to 0.7	1.8	1.4 to 2.3	
Tenosynovitis	Long head biceps tendon	RA	Ultrasound	Dasgupta 2012	163	78	25	20	40	0.66	0.57 to 0.74	0.31 to 0.44	1.2	0.9 to 1.6	0.8	0.5 to 1.2	
Tenosynovitis	Long head biceps tendon	RA	Ultrasound	Lange 2000	51	3	12	17	19	0.14	0.05 to 0.33	0.41 to 0.59	0.3	0.1 to 1.0	1.5	1.0 to 2.1	
Tenosynovitis	Long head biceps tendon	RA	Ultrasound	Ruta 2012	60	19	13	17	11	0.63	0.46 to 0.78	0.39 to 0.57	1.5	0.9 to 2.4	0.6	0.4 to 1.1	
Tenosynovitis	Long head biceps tendon, All bilateral	All	Ultrasound	Cantini 2001	158	33	4	99	22	0.60	0.47 to 0.72	0.90 to 0.96	15	5.8 to 41	0.4 to 0.6	0.3 to 0.6	
Tenosynovitis	Long head biceps tendon, All bilateral	All	Ultrasound	Dasgupta 2012	271	44	41	112	74	0.37	0.29 to 0.46	0.66 to 0.73	1.4	0.98 to 2.0	0.9 to 1.0	0.7 to 1.0	
Tenosynovitis	Long head biceps tendon, All bilateral	All	Ultrasound	Falsetti 2011	61	18	11	21	11	0.62	0.44 to 0.77	0.48 to 0.66	1.8	1.0 to 3.2	0.6 to 1.0	0.3 to 1.0	

Tenosynovitis	Long head biceps tendon, All bilateral	Ultrasound	Falsetti/Frediani 2002	150	19	32	68	31	0.38	0.26 to 0.52	0.58 to 0.68	1.2	0.8 to 1.9	0.7 to 1.2
Tenosynovitis	Long head biceps tendon, RA bilateral	Ultrasound	Dasgupta 2012	163	44	17	28	74	0.37	0.29 to 0.46	0.48 to 0.62	1.0	0.6 to 1.5	0.8 to 1.3
Tenosynovitis	Long head biceps tendon, RA bilateral	Ultrasound	Ruta 2012	62	9.5	0.5	30.5	21.5	0.31	0.17 to 0.48	0.89 to 0.98	19.0	1.2 to 312	0.6 to 0.9