

Supplementary table 1. Summary of studies on the confirmation of a diagnosis of RA

Studies	Study design	Study population (n)	Phase of RA	Disease duration of RA (median)	Diagnostic test Description	Cut-off (if applicable)	Reference standard	Time interval	Sensitivity, % (95% CI)	Specificity, % (95% CI)	Risk of bias*1	Concerns regarding applicability*2
Pedersen, 2014	Cross-sectional	RA (n=18), unspecified arthritis (n=1), ReA (n=1), PsA (n=1), JIA (n=1), arthralgia (n=16), OA (n=9), low back pain (n=1), gout (n=1), haemochromatosis (n=2)	Patients with self-reported RA	NA	ACR 1987 criteria	Yes vs no	Clinical diagnosis according to a rheumatologist	NR	44 (22-69)	94 (81-99)	L/L/L/L	H/L/L
					Adapted ACR 1987 criteria (GS synovitis, US erosions, ACPA)	Yes vs no			72 (47-90)	91 (77-98)		
					Adapted ACR 1987 criteria (GS synovitis, US erosions, RF)	Yes vs no			72 (47-90)	87 (73-97)		
					Adapted ACR 1987 criteria (GS synovitis, erosions on radiography, ACPA)	Yes vs no			56 (31-79)	91 (77-98)		
					Adapted ACR 1987 criteria (PD synovitis, US erosions, ACPA)	Yes vs no			39 (17-64)	100 (90-100)		
					RAMRIS scale for synovitis (MCP joints 2-5)	≥5			69 (39-91)	100 (73-100)		
RAMRIS scale for synovitis (combined wrist and MCP joints 2-5)	≥10	62 (32-86)	94 (73-100)									

ACPA: anti-*citruillinated protein* antibody; ACR: American College of Rheumatology; CI: confidence interval; GS: Gray scale; H: High; JIA: Juvenile idiopathic arthritis; L: Low; MCP: Metacarpophalangeal joint; n: number of patients; NA: Not applicable; NR: Not reported; OA: Osteoarthritis; PsA: Psoriatic arthritis; RA: rheumatoid arthritis; RAMRIS: Rheumatoid arthritis MRI scoring system; ReA: reactive arthritis; RF: Rheumatoid factor; PD: Power doppler; US: Ultrasound.

1. According to QUADAS-2, assessing 4 domains: Patient selection/Index test(s)/Reference standard/Flow and timing; 2. According to QUADAS-2, assessing 3 domains: Patient selection/Index test(s)/Reference standard