Supplemental material

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Supplementary table 2. Summary of studies on the diagnosis of mimicking disease in RA patients

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)	PPV, %	NPV, %	LR+	LR-	OR (95%CI, p-value)	Risk of bias^1	Concerns regarding applicability^2
Ghib, 2018^	Case-control	RA with FM (n=10); RA without FM but with VAS-pain ≥50 (n=10)	Established RA, suspected of mimicking disease	NR	MicroRNA-143	>1.04	FM: NR	NR	90	70						H/H/U/H	L/L/U
Fan, 2016	Cross-sectional	RA (n=279)	Established RA, suspected of mimicking disease	NR	Fibromyalgia Rapid Screening Tool (FiRST)	≥5/6	1990 ACR Fibromyalgia criteria	Same time point	71.4 (41.9-91.6)	84.4 (79.4-88.6)	20.0 (10.0-33.7)	98.2 (95.4-99.5)				L/H/L/U	L/L/L
							Rheumatologist's opinion		82.6 (61.2-95.0)	87.5 (82.7-91.3)	38.0 (24.7-52.8)	98.2 (95.4-99.5)					
Salaffi, 2018	Cross-sectional	RA with FM (n=43); RA without FM (n=249)	Established RA, suspected of mimicking disease	8Y	Derived DAS28 patient-reported components (DAS28-P): calculated by rearranging the components of the DAS28-ESR into the following formula: (0.56×√TJC+0.014×GH)/DAS28	0.6312	ACR 2010 Fibromyalgia criteria	NR	81.40 (66.6-91.6)	80.32 (74.8-85.1)			4.14 (3.5-4.8)	0.23 (0.1-0.5)		L/H/U/L	L/L/L
Sato, 2012	Cross-sectional	Flare of RA (n=18), non-infectious complications (n=23), non-bacterial infection (n=15), bacterial infection (n=62)	Established RA, suspected of mimicking disease	NR	Procalcitonin levels Procalcitonin levels WBC count CRP ESR Procalcitonin and WBC	≥0.5ng/ml ≥0.2ng/ml >8500/m3 ≥0.3 mg/dl >15mm/h ≥0.5ng/ml and >8500/mm3	Bacterial infection: symptoms, bacterial culture tests, imaging studies, and response to antibiotic therapy	Within period of hospital admission	25.8 33.9 66.1 69.8 98.1 21.0	98.2 89.3 58.9 5.4 8.9 98.2	94.1 77.8 64.1 53.1 56.4 92.9	54.5 54.9 61.1 60.0 80.0 52.9	14.33 3.17 1.61 0.03 0.02 11.67	1.32 1.35 1.74 1.69 4.68 1.24	19.13 (2.44-149.78, 0.005) 4.27 (1.58-11.57, 0.004) 2.80 (1.33-5.92, 0.007) 1.70 (0.27-10.55, 0.570) 5.17 (0.56-48.03, 0.149) 14.59 (1.84-115.65, 0.011)	L/L/L/L	L/L/L

ACR: American College of Rheumatology; CI: confidence interval; CRP: C-reactive protein; DAS28: disease activity score assessing 28 joints; ESR: erythrocyte sedimentation rate; EULAR: European League Against Rheumatism; FM: Fibromyalgia; GH: global health; H: High; L: Low; LR+: Positive likelihood ratio; LR: Negative likelihood ratio; MCP: Metacarpophalangeal joint; n: number of patients; NR: Not reported; OR: Odds ratio; RA: rheumatoid arthritis; TJC: tender joint count; U: Uncertain; WBC: White blood cell count; ^: Conference abstract.
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