SITY	Study design	RA patients without of Study population (n)	Disease	Disease duration	RA patients with como Study population (n)	Disease	duration		Cut-off (if applicat e)		Cut-off (if applicat le)		RA patients wit Sensitivity, S ₁ % (95% CI) %	ecificity, P	PV,%		Correlation coefficient (95% CI, p- value)		Sensitivity,	with comorbidity Specificity, PPV, % % (95% CI) (95% CI)	(95% CI)	(95%CI,	Correlation coefficient (95% CI, p- value)	Other	Risk of bias^1	1 Concerns regarding applicabili
s, 2018	Cross-	RA patients (n=357); Obesity/overweight: BMI 27.9 (24-31),		NR																					L/L/H/U	L/L/L
		median (range) RA patients (n=357) with BMI <25 (n=NR)	NR	NR	RA patients (n=357) with BMI 25-30 (n=NR) RA patients (n=357) with BMI >30 (n=NR)		NR NR	MBDA score	NA	CDAI	NA	NR					r=0.33, p=0.0004						r=0.28, p=0.002 r=-0.02, p=0.80			
isens,	Cross- sectional	RA patients with BMI <25 (n=28)			RA patients with BMI 25-29.9 (n=33)	DAS28 3.29	14.2Y, median	US: sum-score of 28 joints (synovitis was defined as grey-scale score ≥2 and/or power Doppler score ≥1) DAS28-US: DAS28 (SJC)	NA NA	SJC28 DAS28	NA NA	Same day						Difference in US-clinical SJC (mean (SD, 95%CI)): 0.429 (3.0, -0.739-1.600), p=0.467 Difference in DAS28 (SJC)						Difference in US-clinical SJC (mean (SD, 95%CI)): 1.818 (2.7, 0.743-2.894), p=0.001; Comparison between groups p=0.203 Difference in DAS28 (SJC) based on US vs clinical	L/L/U/L	L/L/L
					RA natients with RMI			based on US sum-score 28 joints	NA	DAS28	NA .	Same day						based on US vs clinical (mean (95%CI)): -0.014 (- 0.130-0.102), p=0.812						Uniterence in UA328 (SIL) based on US v5 clinical (mean (95%CI)): 0.175 (0.068-0.282), p=0.002; Comparison between groups p=0.0.046 Difference in US-clinical SIC (mean (SD, 95%CI)):		
					≥30 (n=15)	3.62	median																	1.600 (4.0, 0.005-3.195), p=0.049; Comparison between groups p=0.203	L/L/H/L	
anath,	Cross- sectional	RA patients with BMI <25 (n=259)	6.08- 6.15,		RA patients with BMI ≥30 (n=64)	DAS28 6.26, median; CDAI 37.2, median		Lower extremity SJC (below the waist)	NA	ACR core set measures (patient global, physician global, ESR (In), TJC 44)	NA	Same time point												Comparison between groups =0.0.046 Linear Regression A CR Care Set Measures (patient global, physical) global, ESR (inj. 17.044) and BMI (230) predictors) predicting lower extremity SIC (model outcome), for predictor BMI 230: OR 1.633 p=0.005		L/L/L
								SJC44	NA	ACR core set measures (patient global, physician global, ESR (In), TJC 44)	NA	Same time point												Linear Regression ACR Core Set Measures (patient global, physician global, ESR (In), TJC44) and BMI (230; predictors) predicting SIC (model outcome), for predictor BMI 230: OR 1.037, p=0.090		
At joint level Bauer, 2017		Active RA patients with BMI <25 (n=17)	NR	7.4Y	Active RA patients with BMI 25-30 (n=12)	n NR	4.0Y	Clinically swollen joint	VS	PD US (Most active side: e wrist, MCP2-5, PIP2-3, MTP2,5)			64	70	71	. 62				74 58 (p=0.691) (p=0.02)	71 (ns)			Multivariate logistic model for PDUS (accounts for correlation among different joints in the same patients) using BMI (ordinals BMI -25° a. 1, BMI 25° a. 1,		L/L/L
					Active RA patients with BMI >30 (n=14)	n NR	10.1Y	Clinically swollen joint	vs	PD US (Most active side: e wrist, MCP2-5, PIP2-3, MTP2,5)	joint		64	70	71	. 62			66 (p=0.822)	64 44 (p=0.691) (p=0.02)	81 (ns)					
OMYALG																										
	Case	RA patients without	DAS28	13.0Y	RA patients wih FM	DAS28	12.5Y	DAS28	NA	Gray-scale 7-	NA	Same time					r=0.39,						r=0.36,		L/L/U/L	L/L/L
akr, 2015 contr		FM (n=36)	4.0; SDAI 13.1; CDAI 13.1, median		according to ACR 2010 criteria (n=36)	5.2 (4.3- 6.3), median (range); SDAI 31.1				joint US score		point					p<0.05						p<0.05			
						(18.0- 40.3),		DAS28	NA	PD 7-joint US score.	NA	Same time point					r=0.35, p<0.05						r=0.12, ns			
						median		SDAI	NA	Gray-scale 7-	NA	Same time					r=0.57,						r=0.38,			
						(range); CDAI		SDAI	NA	joint US score PD 7-joint US	NA	point Same time					p<0.05 r=0.38,						p<0.05 r=0.01, ns			
						30.4 (18.0-		CDAI	NA	score.	NA	point Same time					p<0.05 r=0.57,						r=0.43,			
						39.7),		CDAI	HM	joint US score	HM	point point					r=0.57, p<0.05						r=0.43, p<0.05			

			median	CDAI	NA	PD 7-joint US	NA	Same time	r=0.37,	r=0.01, ns			
			(range)			score.		point	p<0.05				
Sosa, 2017^ Cross- RA patients wit	hout NR NR	RA patients with FM	NR NR	modifiedDAS28-ESR	NA	DAS28-ESR	NA	Same time			Effect of the presence of fibromyalgia on the score	L/L/H/L	L/L/L
sectional FM (n=95)		according to ACR		(excluding TJC and patient's				point			difference between traditional and modified		
		criteria (n=35)		global assessment of							composite scores, adjusted by age, sex and		
				disease activity)							nodular disease, mean increment (95%CI, p-		
											value): 1.50 (0.60-2.40, 0.001)		
				modifiedDAS28-CRP	NA	DAS28-CRP	NA	Same time			Effect of the presence of fibromyalgia on the score		
				(excluding TJC and patient's				point			difference between traditional and modified		
				global assessment of							composite scores, adjusted by age, sex and		
				disease activity)							nodular disease, mean increment (95%CI, p-		
											value): 1.55 (0.63-2.48, 0.001)		
				modifiedSDAI (excluding	NA	SDAI	NA	Same time			Effect of the presence of fibromyalgia on the score		
				TJC and patient's global				point			difference between traditional and modified		
				assessment of disease							composite scores, adjusted by age, sex and		
				activity)							nodular disease, mean increment (95%CI, p-		
											value): 10.78 (3.23-18.34, 0.006)		
				modifiedCDAI (excluding	NA	CDAI	NA	Same time			Effect of the presence of fibromyalgia on the score		
				TJC and patient's global				point			difference between traditional and modified		
				assessment of disease							composite scores, adjusted by age, sex and		
				activity)							nodular disease, mean increment (95%CI, p-		
											value): 11.34 (3.80-18.89, 0.0158)		
Tamas, 2017 [^] Cross- RA patients tre			DAS28- NR	SJC	NA		NA	NR	r=0.44,	ns		L/L/U/U	H/L/L
sectional with bDM ARDs		with bDMARDs and	CRP 5.13			synovitis, 7-			p=0.015				
without FM (n:	30)	with FM (according to				joint US score							
		difference of ≥7		SJC	NA		NA	NR	r=0.47,	ns			
		between TJC and SJC)				synovitis, 7-			p=0.008				
		(n=9)				joint US score							
				SJC	NA		NA	NR	r=0.57,	ns			
						tenosynovitis,			p=0.001				
						7-joint US							
						score							
				SJC	NA		NA	NR	r=0.46,	ns			
						tenosynovitis,			p=0.011				
						7-joint US							
						score							

ACR American college of inheumatology; bDMARDs: biologic disease emodifying anti-heumatic drugs; BM1: body mass index; CDA1: clinical disease exhivity index; C1: confidence intervol; CRP. Creacthe protein; DA528: disease activity index; S1: confidence intervol; CRP. Creacthe protein; DA528: disease activity index; S2: Gny scale; It high; L1 low; MBDA: mith-biomarker disease activity, MCP: metacarpophalongeal; MTP: metatrarosphalongeal; mr. number of patients; NA: not applicable; NPV: negative predictive volue; NR: not reported; ms. not significant, OR: odds rator; PD: power doppler; PIP: proximal interphalongeal; PIP: poximal in

^{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; "According to AMSTAR-2, highest category as found