

Supplementary Table 1: Determination of the optimal DAS28- γ GT formula

	DAS28 (r, p-value)	DAS28-CRP (r, p-value)	CRP (r, p-value)	HAQ (r, p-value)	PDUS-score (r, p-value)	Framingham (r, p-value)
DAS28		0.84 (<0.001)	0.56 (<0.001)	0.39 (<0.001)	0.53 (<0.001)	0.06 (0.498)
DAS28-CRP	0.84 (<0.001)			0.35 (<0.001)	0.54 (<0.001)	0.03 (0.562)
DAS28- γ GT (1)*	0.73 (<0.001)	0.89 (<0.001)	0.50 (p<0.001)	0.42 (<0.001)	0.44 (<0.001)	0.11 (0.223)
DAS28-γGT (2)**	0.60 (<0.001)	0.75 (<0.001)	0.50 (<0.001)	0.37 (<0.001)	0.41 (0.002)	0.20 (0.007)
DAS28-γGT (3)***	0.57 (<0.001)	0.70 (<0.001)	0.48 (<0.001)	0.35 (<0.001)	0.39 (0.004)	0.30 (0.001)
DAS28- γ GT (4)****	0.39 (p<0.001)	0.54 (<0.001)	0.44 (<0.001)	0.32 (<0.001)	0.22 (0.240)	0.35 (<0.001)
DAS28- γ GT (5)*****	0.31 (<0.001)	0.45 (<0.001)	0.41 (<0.001)	0.29 (0.002)	0.12 (0.521)	0.38 (<0.001)
γ GT	0.003 (0.970)	0.11 (0.237)	0.30 (0.002)	0.17 (0.085)	0.11 (0.254)	0.44 (<0.001)

DAS: Disease Activity Score, HAQ: Health Assessment Questionnaire, CRP: C-Reactive Protein

* $0.56*\sqrt{TJ-28}+0.28*\sqrt{SJ-28}+0.7*\ln(\gamma GT)+0.14*GH$

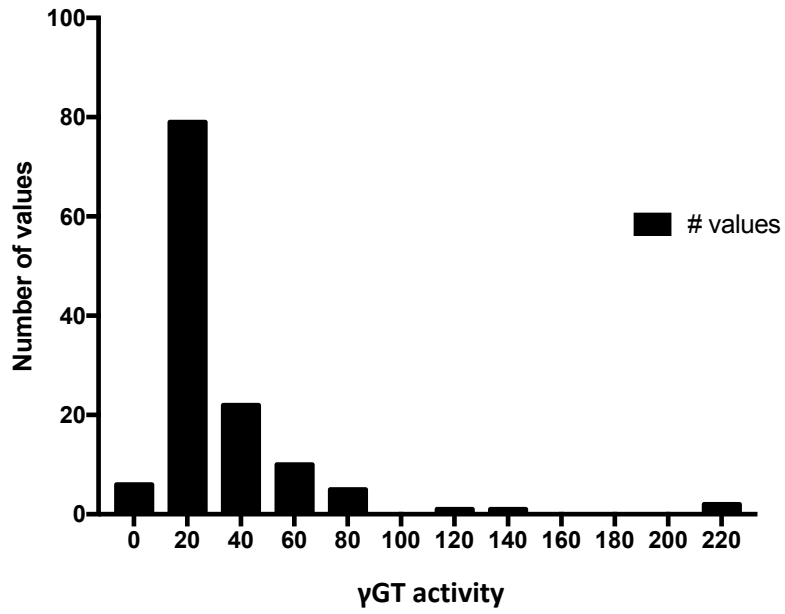
** $0.56*\sqrt{TJ-28}+0.28*\sqrt{SJ-28}+1.5*\ln(\gamma GT)+0.14*GH$

*** $0.56*\sqrt{TJ-28}+0.28*\sqrt{SJ-28}+2*\ln(\gamma GT)+0.14*GH$

**** $0.56*\sqrt{TJ-28}+0.28*\sqrt{SJ-28}+3*\ln(\gamma GT)+0.14*GH$

***** $0.56*\sqrt{TJ-28}+0.28*\sqrt{SJ-28}+4*\ln(\gamma GT)+0.14*GH$

Supplementary Figure 1: Distribution of γ GT activity (UI/L) in our study sample



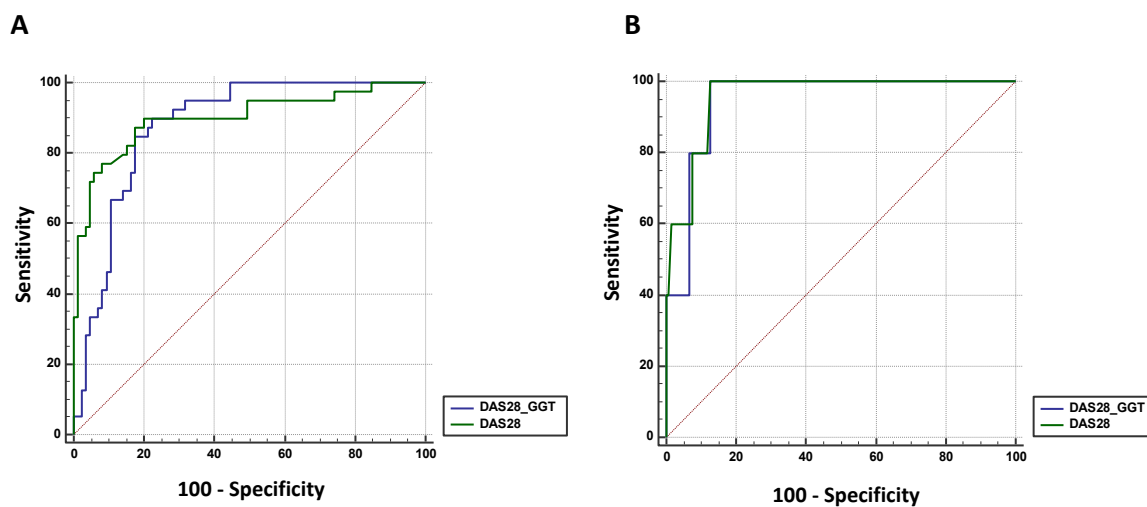
Supplementary Table 2: Multivariate logistic regression analysis including moderate/high cardiovascular risk (Framingham risk score >10%) as the dependent variable

Variables*	Univariate p-value	Odds ratio (95% CI)	p-value
BMI >30 kg/m²	0.036	1.05 (0.30-3.64)	0.935
Metabolic syndrome	<0.001	16.19 (1.72-152.80)	0.015
γGT >35 IU/L	<0.001	3.42 (1.27-9.22)	0.014
DAS28-CRP >5.1	0.065	3.99 (0.37-43.00)	0.253

BMI: Body Mass Index, DAS: Disease Activity Score, CRP: C-Reactive Protein, CI Confidence Interval

**Age, gender, smoking status, high blood pressure, diabetes, dyslipidemia were not entered as covariates since they are used to calculate the Framingham cardiovascular risk score and directly interact with it.*

Supplementary Figure 2: ROC curve analysis assessing the discriminating capacities of DAS28- γ GT and DAS28 to identify patients with active disease (A: DAS28-CRP>3.2 and B: DAS28-CRP>5.1)

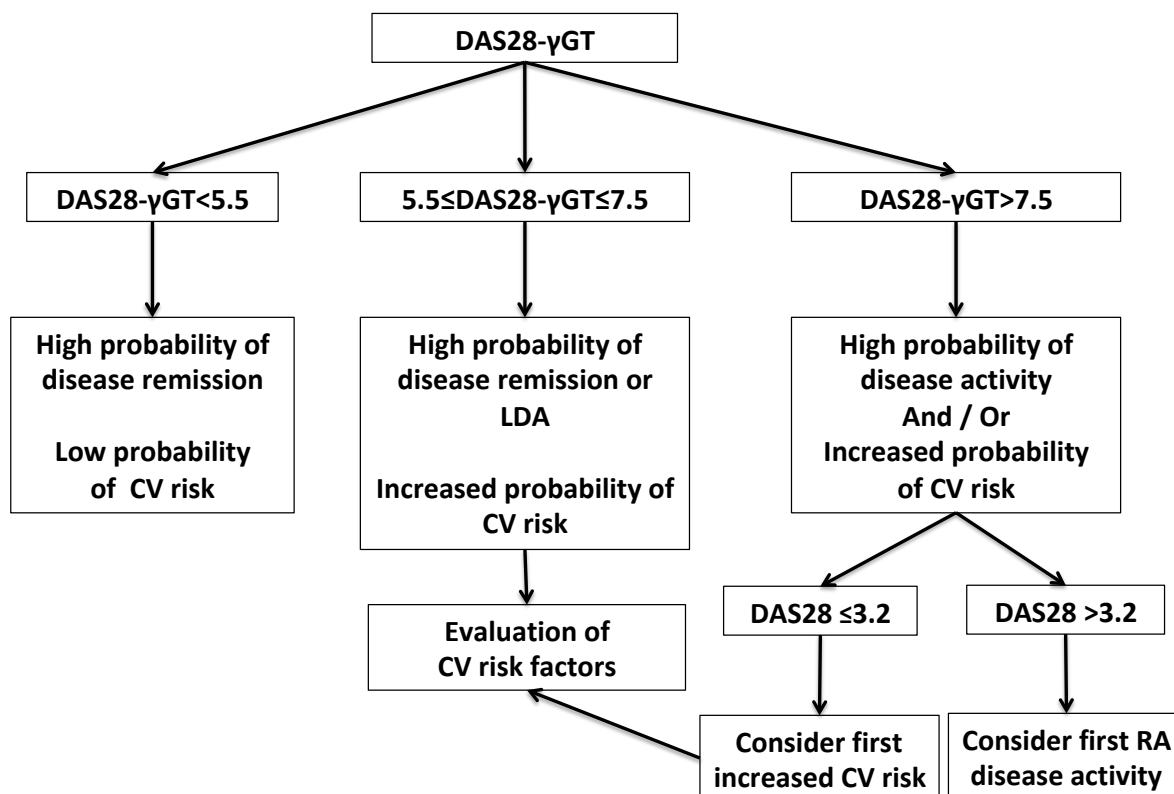


Supplementary Table 3: DAS28- γ GT levels according to joint disease activity and cardiovascular risk

	Number of patients	Joint disease activity			Cardiovascular risk		
		Remission	LDA	Active disease	Low (<10%)	Medium (10%-20%)	High (>20%)
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
DAS28-γGT <5.5	11	11 (100)	0 (0)	0 (0)	11 (100)	0 (0)	0 (0)
5.5≤DAS28-γGT ≤7.5	58	39 (67)	14 (24)	5 (9)	34 (59)	14 (24)	10 (17)
DAS28-γGT >7.5	60	4 (7)	21 (35)	36 (58)	27 (45)	20 (33)	13 (22)

Remission: DAS28-CRP<2.6, LDA, Low disease activity: 2.6≤DAS28-CRP≤3.2, Active disease: DAS28-CRP>3.2

Supplementary Figure 3: Proposed algorithm for the use of DAS28- γ GT in clinical practice, based on the results obtained in our cohort



DAS: Disease Activity Score, CV: Cardiovascular, RA: Rheumatoid Arthritis, LDA: Low Disease Activity (DAS28 < 3.2). Remission is defined by a DAS28 < 2.6