Table 1. Demographic and clinical characteristics at the time of inclusion and at 5 years.

	T0 (n=83)	T5 (n=83)	p
Age years, mean ± SD	56.0 ± 8.9		-
Female, n (%)	75 (90.4)		-
Disease duration years median (q25-q75)	10.4 (4.4-15.7)		-
CVRF, n (%)			
Hypertension	27 (32.5)	38 (45.8)	0.001
Dyslipidemia	25 (30.1)	16 (19.3)	0.041
DM	6 (7.2)	14 (16.9)	0.008
Active smoking	8 (9.6)	6 (7.2)	NS
Overweight/Obesity	67 (81.7)	63 (81.9)	NS
Stroke	0	4 (4.8)	-
Clinical characteristics			
BMI kg/m ² , mean ± SD	28.1 ± 4.1	28.5 ± 4.3	NS
SBP mmHg, mean ± SD	123.7 ± 18.4	126.9 ± 16.8	NS
Total cholesterol mg/dl, mean ± SD	180.8 ± 29.0	173.9 ± 34.2	NS
Triglycerides mg/dl, mean ± SD	136.1 ± 56.1	146.1 ± 64.2	NS
HDL-C mg/dl, mean ± SD	55.2 ± 16.3	55.1 ± 15.9	NS
Statins, n (%)	9 (10.8)	13 (15.7)	NS
Methotrexate, n (%)	71 (85.5)	63 (75.9)	0.039
Glucocorticoids, n (%)	49 (59)	40 (48.2)	NS

NS, non-significant; CVRF, cardiovascular risk factors; DM, diabetes mellitus; BMI, body mass index; SBP, systolic blood pressure; HDL-C, high density lipoprotein cholesterol.

Figure 1. Kaplan-Meier survival curve showing 96% probability of remaining alive at 5 years.

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AB0118

REMEDIATION OF ANXIETY AND DEPRESSIVE DISORDERS IMPROVES HAQ TREATMENT RESPONSE IN RHEUMATOID ARTHRITIS PATIENTS

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Background: Anxiety and depressive disorders (ADD) significantly affect disease activity and functional disability in rheumatoid arthritis (RA) patients. Psychopharmacotherapy (PPT) of ADD attempts to improve RA disease activity and lower progression of functional limitations.

Objectives: To determine factors associated with HAQ treatment response in antidepressants-treated RA-patients at five years endpoint.

Methods: 128 RA-patients (pts) were enrolled, 86% were women with a mean age of 47.4±11.3 (M±SD) yrs. All patients met the full ACR/EULAR 2010 criteria for RA. Functional limitations were assessed using Health Assessment Questionnaire (HAQ), mean HAQ was 1.42±0.78 at baseline. 69.4% RA-pts were already taking prednisone (9 [5; 10] mg/day (Me (25%; 75%)), 84.4% - cDMARDs, 7.8% - bDMARDs (anti-TNF-α - 6.3%, rituximab - 1.6%). ADD were diagnosed by psychiatrist in 123 (96.1%) of RA-pts in accordance with ICD-10 in semi-structured interview. Severity of depression and anxiety was evaluated with Montgomery-Åsberg Depression Rating Scale (MADRS) and Hamilton Anxiety Rating Scale (HAM-A). RA-pts with ADD were divided into the following treatment groups: 1 - cDMARDs (n=39), 2 - cDMARDs + PPT (sertraline or mianserine) (n=43), 3 - cDMARDs + bDMARDs (n=32), 4 - cDMARDs + bDMARDs + PPT (sertraline or mianserine) (n=9). Biologics treatment duration varied from 1 to 6 years, antidepressants - from 6 to 96 weeks. Baseline HAQ scores were 1.39±0.75, 1.42±0.9, 1.58±0.76 and 1.38±0.83 in groups 1-4, respectively. At 5-yrs endpoint in 83 RA-pts differences between baseline and endpoint HAQ scores (Δ HAQ = endpoint HAQ - baseline HAQ) were assessed as HAQ treatment response with minimal clinically important difference (MCID) (Δ HAQ ≥ 0.22). HAQ response rates were 4.2%, 65.5%, 47.6% and 76.7% in groups 1-4, respectively, with the lowest response rate

in group 1 (p<0.0001). Logistic regression analysis was conducted to determine factors associated with RA remission rate.

Results: By univariate logistic regression, anxiety and depressive symptoms remission at 5-yrs endpoint, baseline HAQ and major depression, lower baseline age, BMI and DAS28, no minor depression and cardiovascular diseases at baseline were significantly (p≤0.2) associated with HAQ treatment response (table 1). These variables were subjected to multivariate stepwise logistic regression. Only remission of anxiety and depressive symptoms at 5-yrs endpoint (OR 6.6 (95%CI 1.78 - 24.43), p=0.005), higher baseline HAQ (OR 2.61 (95%CI 1.12 - 6.11), p=0.027) and lower baseline BMI (OR 0.9 (95%CI 0.85 - 0.96), p=0.001) were independently associated with HAQ treatment response at 5-years follow-up.

Table 1. Factors associated with RA remission at 5 years (univariate logistic regression).

Factor	p	OR	95%CI	
			low	up
Anxiety and depressive symptoms remission at 5-yrs endpoint	0.007	5.0	1.561	16.016
Baseline HAQ	0.01	2.657	1.264	5.588
Baseline major depression	0.142	2.082	0.782	5.542
Baseline age	0.098	0.992	0.982	1.002
Body mass index (BMI)	0.048	0.981	0.963	1.0
Baseline minor depression	0.167	0.563	0.249	1.273
Cardiovascular diseases	0.1	0.417	0.147	1.183
Baseline DAS28	0.008	0.077	1.071	2.096

Conclusion: higher HAQ and lower BMI at baseline and remission of anxiety and depressive symptoms at 5-yrs endpoint are independently associated with HAQ treatment response (MCID) at 5-years follow-up.

Disclosure of Interests: None declared

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AB0119

DISCORDANCE OF RAPID3 AND CDAI IN RHEUMATOID ARTHRITIS

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Background: The Clinical Disease Activity Index (CDAI) and the Routine Assessment of Patient Index Data 3 (RAPID3) ascertain rheumatoid arthritis (RA) disease activity and inform treatment decisions. The CDAI has provider and patient components, whilst the RAPID3 only has patient driven measures. During the COVID-19 pandemic, telemedicine visits relied on RAPID3 as a clinical outcome measure and subsequently was incorporated into all clinical visits in addition to the CDAI. On an ad-hoc basis, discrepancies were noted for the disease activity level generated by these two measures. The purpose of this retrospective study was to formally analyze the relationship between these measures.

Objectives: To determine the concordance of the outcome measures RAPID3 with CDAI in patients with established RA as a quality improvement project.

Methods: This is a retrospective study of 49 patients that fulfilled the American College of Rheumatology 2010 criteria for Rheumatoid Arthritis. IRB approval was obtained. The medical records of patients seen between June to October 2020 at the rheumatology department at UF health were reviewed. Data collected included age, gender, race, number of years with RA, Rheumatoid factor (RF) and anti-citrullinated protein antibody (CCP Ab) positivity, disease modifying treatments, ESR and CRP as well as CDAI and RAPID3 scores as calculated by clinic staff. The charts were reviewed by the authors and RAPID3 scores were verified.

Table 1. Patient Population

Age	35-90 years
Race	African American-13 Caucasian-10 Hispanic-3 Not Hispanic=13
RF Positive	35/49 (71%)
CCP Ab	37/49 (75%)
Both RF and CCP Ab Positive	32/49 (65%)
Patients on monotherapy	14/48 (29%)
Patients on dual therapy	29/48 (60%)
Patients on triple therapy	5/48 (10%)
Antirheumatic Drugs used	Plaquenil, methotrexate, leflunomide, etanercept, adalimumab, infliximab, tofacitinib, upadacitinib, rituximab
CDAI and RAPID3 Concordance	18/49 (37%)
RAPID 3 Higher than CDAI	22/49 (45%)
RAPID 3 lower than CDAI	7/49 (14%)
Incorrect Calculation of RAPID3 by clinic staff	11/42 (26%)

Results: The population ranged from 35- 90 years and duration of RA from 1- 30 years. CCP Ab was present in 75% of patients and RF in 71%. Patients were on DMARDs either monotherapy (29%), dual therapy (60%) or triple therapy (10%). Antirheumatic medications used were plaquenil, methotrexate, leflunomide, etanercept, adalimumab, infliximab, tofacitinib, upadacitinib and rituximab. ESR range was 2-110 and CRP 0.2-83.1. The CDAI and RAPID3 concordance was found to be 37% with RAPID3 being higher in 45% of patients. RAPID3 was lower only in 14% of patients. There was incorrect calculation of the RAPID3 26% of the time by clinic staff. Table 1 summarizes this data. Figure 1 shows RAPID3 and CDAI compared in scatterplots.

Figure 1. Scatterplots of three RAPID3 strata. Red dots represent discordant subjects when compared to CDAI. Note: Panel C demonstrates the subjects that were in low disease activity in red that had a high severity RAPID3 score

Conclusion: This study shows that RAPID3 may overestimate disease activity level for patients above low disease activity. Treatment escalation based on RAPID3 in discordant patients may be inappropriate. When making treatment decisions, a measure that includes objective physical examination and provider judgment is desirable.

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AB0120

IDENTIFYING CORE VARIABLES TO DEVELOP A SEVERITY INDEX IN RHEUMATOID ARTHRITIS: A NATIONWIDE DELPHI CONSENSUS

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Background: Early interventions during the “window of opportunity” have been shown to improve clinical outcomes in rheumatoid arthritis (RA). However, intensive treatment can induce toxicity so identifying patients most likely to benefit from it is of great importance. Hence, tools for guiding therapeutic decisions in early disease stages are needed.

Objectives: To identify core variables to develop a RA severity index according to an expert panel.

Methods: An expert panel was prompted to analyze relevant variables to define a “severity” construct, specified as “early severe disease”, able to classify patients with data collected on the first 2 years of the disease. They were also asked to identify potential modifying factors and external criteria to evaluate criterion validity.

An anonymous nationwide 2-round Delphi survey was applied to look for consensus about: (1) the priority of inclusion of each variable, (2) the feasibility to obtain them from usual sources (e.g., medical records) and (3) their definition. Each item was rated on a 10-point (priority) or 5-point (feasibility and definition) Likert scales were 0=complete disagreement and 5-10=complete agreement. After the 1st round, any item rated from 5 to 10 in priority and 3 to 5 for feasibility by at least 70% of responders was included in the final variable list. Items not reaching at least 20% consensus were discarded. The remaining ones would be voted again in the 2nd round and adopted if they reached at least 50% consensus or else discarded.

Results: The task force identified 17 variables to define the “severity” construct (Table 1). Socio-economic status, knowledge of their own disease, type or work adherence to treatment, among others were proposed modifying factors. Rheumatoid factor or anti-citrullinated peptide antibody seropositivity as predictive factors. The physician global assessment and the “burden of treatment” (lines of treatment, number and dose of DMARDs and cumulative steroid dose received) were proposed for evaluating criterion validity.

A total of 61 stakeholders from across Spain took the survey, 56% were female and had 19.8 years of average experience after training. All variables were included after 1st round. Nonetheless, definitions were submitted for a 2nd round after rephrasing, including comments received on the survey. The final list was reduced to 15 items after merging 3 of the initial variables into a new one called “refractoriness” (Table 1).

Conclusion: The consensus process resulted in a list of variables and modifying factors deemed of relevance for the severity construct as we defined it. These items will be used to develop a severity index to guide treatment decisions in early disease stages.

Table 1. Variables proposed for the severity construct.

N	Initially proposed variables	N	Final variables after Delphi
1	Polyarthritis	1	Polyarthritis
2	Big joint involvement	2	Big joint involvement
3	High disease activity at 2 years of follow-up	3	High disease activity at 2 years of follow-up
4	Maintained disease activity in the first 2 years	4	Maintained disease activity in the first 2 years
5	Acute phase reactants persistently elevated	5	Acute phase reactants persistently elevated
6	Extra-articular manifestations	6	Extra-articular manifestations
7	Failure to reach remission	7	Failure to reach remission
8	Need for aggressive therapy in the first 2 years	8	Need for aggressive therapy in the first 2 years
9	Presence of erosions at diagnosis	9	Presence of erosions by at diagnosis
10	Number of erosions at 2 years of follow-up	10	Number of erosions at 2 years of follow-up
11	Lack of improvement in the HAQ-DI	11	Lack of improvement in the HAQ-DI
12	Need for prosthetic surgery	12	Need for prosthetic surgery
13	Hospital Admissions	13	Hospital Admissions
14	Cortico-dependence	14	Cortico-dependence
15	MTX withdrawal due to loss of efficacy	15	Refractoriness
16	Completely absent response to MTX		
17	Number of drugs with lack of efficacy		

Underlined variables on the left were merged into a new variable called “Refractoriness”. HAQ-DI: Health Assessment Questionnaire-Disability Index

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