Abstract AB0360 – Table 2. Echocardiographic findings

	RA (n=63)	Control (n=41)	p
Left atrial dilation, n (%)	9 (14.3)	0 (0)	0.011
Mitral regurgitation, n (%)	39 (61.9)	7 (17)	<0.001
LVMI (gm/m ²), mean±SD	70.96±18	70.29±16.3	0.854
Diastolic dysfunction, n (%)	34 (53.9)	14 (34.1)	0.07
LVCR, n (%)	21 (36.8)	6 (15)	0.022
LVCR or LVCH, n (%)	27 (42.8)	7 (17)	0.01

LVCR – Left ventricular concentric remodelling, LVCH – Left ventricular concentric hypertrophy, LVMI – Left ventricular mass index

Conclusions: LA dilation is more prevalent in RA-patients when compared to matched controls. Prospective studies are needed to evaluate the influence of this condition in cardiovascular outcomes.

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AB0361 THE IMPACT OF OBESITY IN CLINICAL AND ULTRASONIC ACTIVITY OF TUNISIAN RHEUMATOID ARTHRITIS

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Background: Obesity is one of the most frequent comorbidities among patients with rheumatoid arthritis (RA). It has been proposed as a risk factor of poorer response to treatment and lower likely chance of achieving RA disease remission.¹

Objectives: The objective of this study was to evaluate the effect of obesity on clinical and musculoskeletal ultrasound (MSUS) disease activity.

Methods: Cross-sectional clinical and laboratory data were collected on 44 RA patients. MSUS assessment of power Doppler (PDUS) and grey scale (GSUS) hypertrophy and effusion was performed on 11 joints of dominant hand (wrist, metacarpophalangeal 1–5 and proximal interphalangeal 1–5). PDUS and GSUS were scored semi-quantitatively on a scale of 0–3. The max score of the views obtained for each joint was computed and then was theses maximums were summed across all 11joints to obtain total PDUS (range 0–33) and GSUS (range0–33) scores. DAS28/ESR was calculated. Patients were categorised by BMI (kg/m²): <25 (group 1), 25–30 (group 2), and >30 (group 3). Demographic, clinical and ultrasonographic characteristics were compared across BMI groups. P values<0.05 were considered statistically significant.

Results: The overall cohort was 88.6% female, 43.2% ACPA positive and 63.6% RF seropositive with a mean age of 53.8 and disease duration of 12.9 years. The mean BMI was 28.6. Eighty two percent of patients were on sDMARD, 18.2% were on Biologics, and 68.2% of patients were on prednisone. There were no significant differences in these characteristics across the BMI categories. The overall median and interquartile ranges (IQR): 4.1 (1.3) for DAS28/ESR, 3.9 (4.1) for GSUS scores and 4 (5.1) for PDUS scores. The disease activity as measure was not significantly different across the BMI groups (p=0.61). Both GSUS and PDUS scores were not significantly different across BMI groups. Concerning GSUS score: the median (IQR) scores was 5.3 (5.4) for group1, 4.4 (4.3) for group2 and 2.6 (2.7) for group3 (p=0.41). For the PDUS scores the median (IQR) scores was 6 (8.6) for group1, 4.3 (4.1) for group2 and 2.3 (2.7) for group3 (p=0.37). There was no statistically significant correlation of BMI with ultrasound scores (r = –0.19, p=0.2 for GSUS score and r = –0.22, p=0.14 for PDUS score).

Conclusions: Our study didn't proved differences in clinical or ultrasonic disease activity of RA among BMI. This finding doesn't exclude the hypothesis suggesting that obesity is risk factor of refractory RA which requires a larger number of patients to confirm.

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AB0362 FACTORS ASSOCIATED WITH THE DEVELOPMENT OF ARTHRITIS IN PATIENTS WITH ARTHRALGIAS CLINICALLY SUSPECTED OF EVOLVING INTO ARTHRITIS: EXPERIENCE OF A PRE-ARTHRITIS CLINICS

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Background: Despite the fact that genetic and serological risk factors have been studied in rheumatoid arthritis (RA), the symptoms phase of preclinical RA is poorly characterised. Taking into account the importance of early diagnosis and effective treatment for the prevention of structural damage and long-term disability in RA, it is important to find clinical or image variables that identify patients with clinically suspected arthralgias at risk of developing a chronic arthritis (CSA).

Objectives: To identify baseline clinical, immunological and ultrasound variables in patients with arthralgias clinically suspected of progression to chronic arthritis.

Methods: Longitudinal prospective study of patients with CSA and follow-up from November 2015 in pre-arthritis clinics. Patients were assessed at baseline and every 6 months until 2 years, with clinical, laboratory and ultrasound data using standardised protocols. The criteria for eligible patients for inclusion in the study were: ≤12 months of symptoms onset, inflammatory arthralgias (predominance in nights or mornings, improvement during the day or with movement, and morning stiffness of ≥30 min), and the involvement of small joints of hands or feet. Patients with clinical synovitis at baseline visit, patients with fibromyalgia or osteoarthritis were excluded.

Results: Twenty-six patients were recruited in 26 months of the study (1 male, 25 female), with an average baseline age of 44.7±12.6 years, an average delay time of symptoms to first visit of 8.7±3.3 months, a mean follow-up time of 7.7±8.1 months an average body mass index (BMI) of 27.7±7.2. Five patients had familial background of autoimmune diseases in first degree relatives (RA, psoriasis, inflammatory bowel disease), 6 (23.1%) were seropositive (RF and/or ACPA), 7 (26.9%) had increased baseline acute-phase reactants (PAR), and 11 (47.8%) were smokers or former smokers. Most of the patients reported a progression of the arthralgias (55%) and a subjective joint swelling at some point (70%). Of 24 patients, 8 (33.3%) developed clinical arthritis (7 RA, 1 undifferentiated arthritis), with a longer follow-up (15.7±7.4 vs. 7.5±7.2 months, p=0.016), greater baseline HAQ (11.8±8.3 vs. 3.9±4.8, p=0.033) and higher percentage of moderate inflammatory activity in the baseline ultrasound (83.3% vs. 8.3%, p=0.004), compared to patients that didn't develop arthritis. There was a trend towards a higher seropositivity, (37.7% vs. 18.8%), a higher patient global disease assessment (45±29 vs. 30±27 on a 100 mm scale), higher patient pain scores (using a visual analogue pain 100 mm scale) (58±41 vs. 34±23) among patients who eventually developed arthritis, although not statistically significant. No differences were found with PAR, BMI, age, smoking habit or painful joint count at baseline visit.

Conclusions: In our pre-arthritis clinics of patients with clinically suspicious arthralgias, 33% progressed to arthritis, underlying the importance of these clinics. Functional disability and ultrasound at baseline visit are especially useful in predicting future progression to arthritis. It is necessary to recruit more patients in order to obtain more robust conclusions.

Disclosure of Interest: None declared

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AB0363 RHEUMATOID ARTHRITIS AND SICKLE CELL DISEASE: CLINICAL, BIOLOGICAL, RADIOLOGICAL AND THERAPEUTICS SPECIFIC ASPECTS. A RETROSPECTIVE OBSERVATIONAL STUDY

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Background: Thanks to medical advances in sickle cell disease (SCD) treatments, practitioners have to be aware of new comorbidities, as rheumatoid arthritis (RA).

Methods: We conducted a retrospective, observational and monocentric study about clinical, biological and radiological specific aspects of RA in SCD patients and studied the impact of anti-rheumatic drugs, comparing the number of SCD

flares occurring six months before/after their introduction, using medical files and phone inquiry.

Results: Twenty-three patients were included in this study. Data about RA treatments and SCD flares could be collected for 15 patients. Middle age at RA diagnostic was 32.9 years-old, sex ratio was 4.75F/1M. 74% of the patients were RF positive, 65% were ACPA positive. 74% of the patients had articular damages. Among them, 100% had severe carpite which appears to be the major radiological expression of RA in SCD patients, occurring sometimes without finger bone erosion. 100% received at least one specific drug for RA, 35% a biotherapy. There was no significant difference in the number of crisis before and after methotrexate introduction ($p=1$) or anti TNF alpha drugs ($p=0.35$ IC95% [-1.26;0.51]). Methotrexate had to be stopped for 3 patients because of acute chest syndrome, which did not occur with anti TNF. No infection was noticed.

Conclusions: In conclusion, in SCD, RA occurs sooner in life course and to be more severe with a particular pattern: carpite and tarsite without finger bone erosion. The use of biotherapy appears to be safe, with a close monitoring.

Disclosure of Interest: None declared

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AB0364

REMARKABLE INTERNATIONAL VARIABILITY IN REASONS FOR NON-PARTICIPATION IN THE GLORIA TRIAL

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Background: GLORIA is an ongoing large pragmatic trial that examines harm, benefit and costs of low-dose glucocorticoids added to the standard treatment of RA patients of 65 years or older. The eligibility criteria are non-restrictive: RA, age ≥ 65 years, disease activity score (DAS28) of ≥ 2.6 , and no current glucocorticoid treatment. Patients with comorbidity are expressly included, and the impact of trial procedures on normal care is minimal. Nevertheless, inclusion proves to be challenging. We have prospectively sampled all the reasons for ineligibility across a number of centres in different countries participating in the GLORIA trial.

Methods: Rheumatologists from 8 centres in Germany, Hungary, The Netherlands, Portugal and Romania screened the patient list of at least two full clinic days. For each patient, the eligibility and all possible reasons of exclusion were recorded.

Abstract AB0364 – Table 1. Percentage of patients ineligible for the GLORIA trial, per reason (patients can have more than one reason)

Center	n	Percent ineligible for:				
		Age	Disease Activity	Current Temporary GC	Other	
Total	370	58	58	28	5	11
The Netherlands						
Amsterdam	156	54	70	22	5	11
Rotterdam	43	63	58	12	2	9
Leeuwarden	46	51	70	11	4	19
Germany, Berlin	23	52	52	65	0	17
Portugal						
Coimbra	21	58	21	8	4	17
Lisbon	10	60	60	80	80	10
Hungary, Debrecen	46	75	43	55	0	2
Romania, Bucharest	18	56	22	44	0	6

Results: In total, 385 patients were screened. Of these patients, 15 (4%) were eligible to participate in the GLORIA trial. In Germany, Romania and Portugal (Lisbon) none of the screened patients proved eligible.

The most common reasons for ineligibility were inactive disease and age (both 58%) (table 1). Current glucocorticoid use was reported in 28%, 5% had a temporary reason (i.e. recent switch of therapy or glucocorticoid use), and 51% had more than one reason for ineligibility. We found remarkable differences between the sites in the distribution of the main reasons for ineligibility (table 1).

Of the eligible patients, 1 was already participating, 3 were included after this screening, and 2 were currently considering participation; 9 declined participation (most common reasons: fear of glucocorticoids, not interested to participate, preference for GC injections or declining additional therapy).

Conclusions: In this prospective study, we found remarkable differences between countries in reasons for non-participation in our ongoing GLORIA trial. The willingness of eligible patients to participate was low in this elderly population, despite the pragmatic design. Earlier studies also showed that it is challenging to include elderly patients in a clinical trial.^{1,2} Pre-screening of patients in potential sites can provide important information on the potential to recruit patients in a trial, but the actual willingness of patients to participate remains hard to predict.

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AB0365

THE INSULIN RESISTANCE, METABOLIC SYNDROME AND TYPE 2 DIABETES MELLITUS DEVELOPMENT RISK ASSESSMENT IN RHEUMATOID ARTHRITIS PATIENTS

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Background: The insulin resistance (IR) is the known risk factor of type 2 diabetes mellitus (DM) and potential cardiovascular complications. But it's not feasible in routine practice to calculate special indices to determine IR, as insulin levels monitoring is not a standard procedure in RA pts. Metabolic syndrome (MS) criteria and questionnaires designed to assess the risk of DM development can help to differentiate a subgroup of pts, requiring more accurate evaluation of their IR status.

Objectives: To determine how IR relates with MS and DM development risk assessment in RA patients.

Methods: A total of 46 RA pts (39 women, 7 men, 57 [39; 64] years old) without established DM were enrolled in the study, including 14 pts with IR and 32 pts without IR, matched by age and sex. IR was defined as Homeostasis Model Assessment of Insulin Resistance (HOMA-IR) index >2.77 . National Cholesterol Education Program/Adult Treatment Panel III (NCEP/ATPIII) and International Diabetes Federation (IDF) criteria were used to confirm MS. The abdominal obesity was determined as waist circumference (WC) ≥ 80 cm for women and ≥ 94 cm for men (by IDF), and WC ≥ 88 cm for women and ≥ 102 cm for men (by NCEP/ATPIII). If the total score of questionnaire Finnish Type 2 Diabetes Risk Assessment Form (FINDRISK) was ≥ 12 , the DM development risk was considered as moderate or high.

Results: The body mass index was higher in pts with IR than in those without IR (28,5 [24,8; 32,5 kg/m² vs 22,4 [20,1; 25,4 kg/m², $p<0.001$). Abdominal obesity was documented in 100% pts with IR and in 41% pts without IR by IDF criteria ($p=0.002$), in 64% and 22% pts, respectively, by NCEP/ATPIII criteria ($p=0.01$). There were no differences in DAS28, CRP and ESR values and glucocorticoids users proportions. MS by IDF criteria was diagnosed in 57% pts with IR and 19% pts without IR ($p=0.02$), and MS prevalence by NCEP/ATP III criteria was similar in both groups (36% vs 16%, respectively, $p=0.2$). Higher rates of moderate and high risk for DM development were found in pts with IR compared to pts without IR (71,4% vs 31,2%, $p=0.03$).

Conclusions: The FINDRISK and IDF questionnaires, but not the NCEP/ATP III criteria of MS, can be helpful in selecting RA pts with potential IR. Abdominal obesity was the key factor indicative of IR in RA pts. On the other hand, IR may not be there even in the presence of several traditional DM risk factors. Therefore further clarification of potential contribution of RA-related risks is needed.

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