years. In AS cases, the estimated median score was 5.4 and 5.8 for men and women, respectively ($p > 0.05$). We observed significant increase of estimated median score between AS patients aged 15–19 years (BASMI score=2.0) and AS patients aged ≥ 60 years (BASMI score=6.4) ($p < 0.05$).

Conclusions: Our data suggest that it is uncommon for healthy individuals to score zero on the BASMI. The magnitude of increase in BASMI score is apparent with increasing age, but not sex in the healthy individuals. Establishment of normative values may aid baseline measurement and monitor change of spinal mobility in AS patients over time, as well as help assess the impact of clinical interventions.

Disclosure of Interest: None declared

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THU0682 HUMAN HISTOCOMPATIBILITY ANTIGENS (HLA) CLASS I IN ANTERIOR UVEITIS PATIENTS WITH AND WITHOUT SPONDYLOARTHRITIS

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Background: Anterior uveitis (AU) and spondyloarthritis (SpA) are associated with HLA-B27. Previous genetic studies in different populations demonstrated other associations, in particular, HLA, both common and different for AU and SpA.

Objectives: To assess the relationship of HLA class I antigens with AU depending on the presence or absence of SpA.

Methods: 148 pts with AU were typed. All pts were divided into 2 groups: 1–52 pts with confirmed diagnosis of SpA (AU + SpA), 96 pts – with other forms of AU (52 – idiopathic AU, 29 – viral AU, 2 – multiple sclerosis, 2 – toxoplasmosis, 1 – sarcoidosis, 1 – tuberculosis, 3 – chlamydial AU, 2 – Behcet's disease, 3 – juvenile chronic arthritis, 1 – Fuchs's heterochromic iridocyclitis). 150 healthy donors formed control group. Analysis of the distribution of HLA- class I antigens (loci A, B, Cw) was performed comparing 2 groups of patients with AU and each group with control.

Results: HLA-27 in the group of pts AU + SpA identified in 96.1% (50/52), in the group AU – in 40.6% (39/96), in control – in 7.3% (11/150). If HLA-27 was present in the genotype, the risk of developing of common pathology (AU + SpA) was OR=315.9 [95% CI 61.9–2176.7], $p < 0.0000001$, the risk of AU – OR=8.7 [95% CI 3.9–19.4], $p < 0.000001$. Among locus C antigens high frequency of Cw2 was identified in the groups AU + SpA and AU compared with control (64.0%, 36.3% and 10.0%, respectively): AU + SpA vs control - $p < 0.000001$, AU vs control, - $p < 0.0001$. The occurrence of Cw7 was significantly lower in the group AU + SpA in comparison with control: 12.8% and 38.7%, $p = 0.002$. In the group AU the occurrence of this antigen was not significantly different from the control group and the group AU + SpA.

Conclusions: The analysis of the distribution of HLA class I antigens confirmed association of HLA- B27 with AU in Russian population. Other associations, except Cw2, were not identified. Such significant increase of Cw2 in two groups of pts with high frequency of B27 is natural due to the phenomenon of linkage disequilibrium for HLA-B27 and Cw2 antigens. Cw7 antigen can play a "protective" role in relation to SpA, because the frequency of this gene in the group AU was not reduced compared to control.

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THU0683 PREDICTORS FOR PRETERM DELIVERY AMONG PREGNANT WOMEN WITH RHEUMATOID ARTHRITIS AND JUVENILE IDIOPATHIC ARTHRITIS

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Background: It has previously been shown that pregnant women with inflammatory arthritis are at an increased risk for preterm delivery (PTD), yet it remains unclear what underlying maternal factors may drive this excess risk.

Objectives: The aim of our study is to identify overall predictors for PTD among women with rheumatoid arthritis (RA) and juvenile idiopathic arthritis (JIA) and to

analyse the contribution of maternal disease activity, medication use, and comorbid pregnancy conditions on the risk for PTD in this population.

Methods: Data were obtained from the Organisation of Teratology Information Specialists (OTIS) Autoimmune Disease in Pregnancy Project, a prospective cohort study among pregnant women in the U.S. and Canada. Women who enrolled between 2004 and 2017 prior to 19 weeks' gestation, had not enrolled with a previous pregnancy, and delivered at least one live born infant were considered eligible for analysis. All data were obtained by maternal report via telephone interviews and confirmed in the medical record when available. For our statistical analysis, Poisson regression with robust standard errors was used to estimate multivariable adjusted risk ratios.

Results: Mothers with RA and JIA had a higher risk of PTD, preterm labour, early term delivery, and caesarian section versus comparison women. Women with RA additionally had a higher risk of gestational diabetes mellitus (GDM), and women with JIA had a higher risk of preeclampsia versus the comparison group. Active disease (defined as patient activity scale (PAS) score > 3.70) was associated with PTD among women with RA both at intake and anytime during pregnancy, and this association remained after adjustment for corticosteroid (CS) use (aRR 1.60, 95% CI 1.12–2.30; aRR 1.54, 95% CI 1.08–2.20, respectively). CS use in all three trimesters was associated with PTD among women with both RA and JIA, an association that remained after multivariable adjustment for maternal factors including disease activity. Use of non-steroidal anti-inflammatory drugs (NSAIDs) in the first trimester was associated with PTD in women with JIA (aRR 2.31, 95% CI 1.04–5.14). Additional analysis showed that preeclampsia was associated with a higher risk of PTD among both RA and JIA women (aRR 1.92, 95% CI 1.12–3.31; aRR 3.01, 95% CI 1.10–8.23, respectively) but not in the comparison group. GDM and caesarian section were associated with a higher risk of PTD exclusively among RA women (aRR 1.84, 95% CI 1.07–3.15 and aRR 1.58, 95% CI 1.09–2.28, respectively) and fever during pregnancy increased the risk for PTD exclusively among women with JIA (aRR 3.45, 95% CI 1.47–8.08).

Conclusions: Women with RA and JIA are at risk for preterm delivery. Maternal disease activity and medication use, particularly corticosteroid use, may explain much of this excess risk.

Disclosure of Interest: None declared

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THU0684 PREVALENCE OF RHEUMATIC DISEASES IN ADULT POPULATION IN SPAIN. EPISER 2016 STUDY

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Background: Prevalence of rheumatic diseases was first studied in Spain in 2000 EPISER 2000 study¹). Sociodemographic and lifestyle changes during the last 16 years and their possible influence in prevalence figures justify a new study.

Objectives: To estimate the prevalence of rheumatoid arthritis (RA), psoriatic arthritis (PsA), ankylosing spondylitis (AS), systemic lupus erythematosus (SLE), Sjögren syndrome, symptomatic osteoarthritis (knee, hip, hands, cervical and lumbar spine), fibromyalgia, gout and symptomatic osteoporotic fracture in adult population in Spain.

Disease	Prevalence	95% CI
Cervical osteoarthritis	10.1%	9.1–11.2
Lumbar osteoarthritis	15.5%	14.3–16.8
Hand osteoarthritis	7.9%	7.0–8.9
Hip osteoarthritis	5.2%	4.4–6.0
Knee osteoarthritis	13.9%	12.7–15.1
RA	0.9%	0.7–1.3
PsA	0.6%	0.4–0.8
AS	0.4%	0.3–0.7
Gout	2.5%	2.0–3.1
SLE	0.2%	0.1–0.4
Sjögren syndrome	0.3%	0.2–0.5
Fibromyalgia	2.4%	2.1–2.9
Symptomatic osteoporotic fracture	1.8%	1.4–2.4

Methods: Population-based multicenter cross-sectional study, with the participation of 78 municipalities in the 17 Spanish autonomous communities. The reference population are adults aged 20 and above residing in Spain. All participants gave their informed consent. CATI system (Computer Assisted Telephone Interview) was used for initial data collection and screening questionnaire. Diagnostic suspicions and diagnosis referred by the participants were studied by rheumatologists in the referral hospital for the selected municipalities. Statistical analysis: the prevalence of the rheumatic diseases were calculated using estimators and their

95% confidence intervals. Weights were calculated in each of the sampling stages in accordance with the probability of selection. The distribution of population in Spain obtained from the National Statistics Institute was taken into account.

Results: 4916 subjects were included in the study. 4753 completed their participation. Prevalence of rheumatic diseases were the following: The negative predictive value (NPV) of the initial screening questionnaire was 93.8%. The lower NPV corresponded to knee osteoarthritis (95.1%).

Conclusions: Prevalence of RA, PsA, AS, gout and SLE seems to be higher than previously published in other European countries.

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THU0685 CARDIOVASCULAR RISK ESTIMATION IN SLE PATIENTS: A COMPARISON OF THREE ALGORITHMS

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Background: Cardiovascular (CV) disease is a major cause of mortality and morbidity in SLE patients; several instruments have been developed to estimate the 10 years risk of major CV events in the general population according to the presence of traditional CV risk factors. However, it is well known that traditional CV risk factors cannot fully explain the increased CV disease in SLE. Recently, a new version of the Qrisk algorithm was released (QRISK3) incorporating new variables associated with increased risk of CV disease, including SLE diagnosis and the GC use.

Objectives: To assess the 10 years CV risk in a cohort of SLE patients by comparing three different algorithms.

Methods: Consecutive patients with a diagnosis of SLE according to the ACR criteria were recruited from the inpatients and outpatients clinics of our Unit. Previous major CV events (myocardial infarction and stroke) were considered exclusion criteria. Traditional CV risk factors, disease activity and damage as well as therapies and comorbidities were evaluated. Disease activity was assessed with the SLEDAI score, organ damage with the SLICC/DI. Three algorithms to estimate the 10 years risk of major events were applied: the Framingham score, the ACC/AHA score and the QRISK3. This latter incorporates new variables associated with increased risk of cardiovascular disease, including SLE and GC use.

Abstract THU0685 – Table 1

Cumulative organ involvement (%)	
Renal	45%
Articular	75%
Hematological	52%
Cutaneous	52%
Neuropsychiatric	10%
Serositis	20%
Ongoing therapies (%)	
Antimalarials	80%
Glucocorticoids	60%
Immunosuppressants	45%
Traditional CV risk factors (%)	
BMI > 30	5.8%
BMI > 25	12.5%
Sedentary life style	46%
Hypertension	33%
Diabetes	4%
Family history of CV events	15%
Actual smoking	20%
Dyslipidemia	35%
Metabolic syndrome	12%

Results: 115 SLE patients (90.5%) without previous major CV events were included in this analysis. They were predominantly females (93%), Caucasian (96.5%) with a mean age at enrollment of 42.8±12.5 and a mean disease duration

of 13.4±9.2 years. The prevalence of organ involvement and traditional risk factors are reported in table 1. Disease activity at enrollment was low (median SLEDAI 2, IQR 0–4) while 39.1% was presenting at least one organ damage.

The median Framingham risk score resulted 4.5% (IQR 2.4–8.6), the ACC/AHA resulted 1.2% (0.5–3.2), the QRISK3 resulted 5.4% (2.4–9.6). According to the three methods, there was a significant difference in the risk stratification: 10% of patients at medium-high CV risk according to the Framingham score, 5% with the ACC/AHA score and 21% with the QRISK3. The median “healthy heart age” of our cohort (the age at which a healthy subject has the same CV risk) provided by the QRISK3 resulted 62 years.^{52–68}

Conclusions: These data show that by applying the QRISK3 algorithm a significant percentage of patients would be reclassified at high risk of CV events with respect to the traditional CV risk scores. Longitudinal data are necessary to validate the QRISK3 accuracy against the traditional scores in the identification of SLE patients at higher risk of CV events.

Disclosure of Interest: None declared

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THU0686 CHANGES IN HEALTH-RELATED QUALITY OF LIFE OVER 5 TO 8 YEARS IN 1347 PATIENTS WITH EARLY ARTHRITIS OR EARLY INFLAMMATORY BACK PAIN

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Background: Health-related quality of life (HRQoL) is a priority for patients.

Objectives: The objectives were to describe the changes in HRQoL over 5–8 years in patients with early arthritis (EA) or early inflammatory back pain (IBP), and to explore factors associated with HRQoL.

Methods: In 2 prospective observational French cohorts (ESPOIR for EA patients and DESIR for early IBP patients), HRQoL was assessed every 6 months during the first 24 months and then every year over 5–8 years, using the SF36 physical composite score (PCS) and mental composite score (MCS) (range 0–100, US population norm: 50). Disease activity was assessed by DAS28-ESR and ASDAS-CRP. Univariate and multivariate linear mixed-effect models, and trajectory-based mapping (k-means) were applied.

Figure: Evolution of SF36-MCS and PCS over follow-up in EA and early IBP

Lines represent changes of mean SF36-MCS and mean SF36-PCS for EA and IBP; 95% confidence intervals were not represented because they were very small. The number of available data is between 696 and 508 according to the timepoint for SF-36 in EA and 646 to 422 according to the timepoint for SF-36 in IBP.

Figure 1 Evolution of SF36-MCS and PCS over follow-up in EA and early IBP

Results: In all, 1 347 patients (701 EA and 646 early IBP) were analysed: mean age 48.4±12.2 and 33.9±8.7 years respectively; mean disease duration 3.4±1.7 and 18.2±10.8 months, 76.3% and 55.0% females. At baseline, in EA, mean PCS and MCS were respectively 40.2±9.1 and 40.4±11.2, and in early IBP respectively 38.5±8.5 and 39.8±10.9. Over follow-up, HRQoL mean levels and trajectories improved mostly over the first 6 months (p<0.001). Overall, 54%–61% of patients reached levels of HRQoL close to population norms. DAS28-ESR and ASDAS-CRP over time were related to PCS (range of explained variance: 9% >43%, p<0.001 in the mixed models) but not to MCS.