Collaborating Clinics Damage Index score (SDI). Internal consistency and test-retest reliability, convergent and discriminant validity were examined.

Results: 328 Russian SLE patients were enrolled in the study (M/F 30/298, mean age 34.4±11.5 years, mean disease duration 106.3±97.9 months; mean SLEDAI 2K 9.6±8.0; mean SDI 0.2±0.6). The LupusQoL-Russian demonstrated substantial evidence of construct validity. Each domain showed good correlation when compared with equivalent domains of the SF-36 ($p<0.001$ for all comparisons). LupusQoL-Russian discriminated between patients with different degrees of disease activity according to SLEDAI 2K: Lupus-QoL domains showed a trend to lower values in patients with higher disease activity (SLEDAI-2K $\geq$ 4) compared with those with lower disease activity (SLEDAI 2K<4), reaching statistically significant difference when considering the domains "Pain", "Planning", "Intimate relationship" and "Body image" ($p=0.007$, $p=0.0004$, $p=0.003$ and $p=0.007$, respectively). LupusQoL-Russian was significantly lower for "Physical health", "Planning" and "Fatigue" in patients with SDI $\geq$ 1 ($p=0.002$, $p=0.03$, and $p=0.03$) respectively (table 1). Test-retest reliability was good to excellent between baseline and day 3 (intra-class correlation coefficient (ICC) 0.7–0.9)

Abstract FRI0357 – Table 1. External divergent validity (N=328)

Domain	SLEDAI-2K $\leq$ 4 (n=113)	SLEDAI-2K $\geq$ 4 (n=215)	p-value	SDI $\leq$ 1 (n=142)	SDI $\geq$ 1 (n=186)	p-value
Physical health, mean $\pm$ SD	70.1 $\pm$ 22.0	64.9 $\pm$ 23.6	0,07	71,01 $\pm$ 22,5	63,3 $\pm$ 23,1	0,002
Pain, mean $\pm$ SD	74,7 $\pm$ 23,6	67,5 $\pm$ 24,8	0,007	72,3 $\pm$ 24,2	68,2 $\pm$ 24,8	0,1
Planning, mean $\pm$ SD	71,1 $\pm$ 27,9	60,1 $\pm$ 28,0	0,0004	67,7 $\pm$ 27,3	60,9 $\pm$ 29,0	0,03
Intimate relationship, mean $\pm$ SD	78,3 $\pm$ 28,7	69,9 $\pm$ 31,7	0,003	76,06 $\pm$ 28,4	70,6 $\pm$ 32,5	0,22
Burden to others, mean $\pm$ SD	61,2 $\pm$ 26,8	54,2 $\pm$ 28,0	0,03	55,7 $\pm$ 28,4	57,4 $\pm$ 27,3	0,68
Emotional health, mean $\pm$ SD	67,3 $\pm$ 24,8	63,2 $\pm$ 24,6	0,13	66,2 $\pm$ 25,2	63,3 $\pm$ 24,3	0,24
Body image, mean $\pm$ SD	71,1 $\pm$ 24,7	62,02 $\pm$ 28,5	0,007	66,6 $\pm$ 27,9	64,03 $\pm$ 27,3	0,33
Fatigue, mean $\pm$ SD	65,0 $\pm$ 24,5	65,09 $\pm$ 24,8	0,22	65,7 $\pm$ 25,3	60,35 $\pm$ 24,0	0,03

Conclusions: The LupusQoL-Russian is valid to assess quality of life in SLE patients

Disclosure of Interest: None declared

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FRI0358 FACTORS ASSOCIATED WITH PULMONARY MANIFESTATIONS IN SJÖGREN SYNDROME

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Background: Primary Sjögren's Syndrome (pSS) is a systemic autoimmune disorder characterised by lymphocytic infiltration of the exocrine glands resulting in dry syndrome. Approximately one-third of patients have extraglandular systemic findings, such as respiratory symptoms (43%–75%), that are also considered to be a cause of morbidity and conditioning quality of life. The aim of the study is to estimate the prevalence of pulmonary manifestations in pSS, and to identify factors associated with its development.

Methods: SJOGREN-SER (Spanish Rheumatology Society Registry of pSS) is a multicenter cross-sectional study of pSS patients under active follow-up at 33 rheumatology departments through Spain. Patients fulfilled the European-American consensus criteria of 2002. Airway disease (dry cough, xerotrachea, bronchial, hyperresponsiveness and airway obstruction) and pulmonary involvement (ILD, pulmonary amyloidosis, pulmonary arterial hypertension, vasculitis and pleural involvement) were considered according to the definition contained in EULAR Sjögren's Disease Activity Index (ESSDAI), as well as Sjögren's

Syndrome Disease Damage Index. Bivariate logistic regression models and multivariate analysis were used to establish the independent effect of patient characteristics associated with pulmonary manifestations. The results were considered significant when the P value was less than 0.05.

Results: The SJOGREN-SER registry included 437 patients (95% women, median age at inclusion 59 years [50–68 years] and mean of ESSDAI 2 (IQR 0–4)). One hundred and seventeen patients (26.8%) had pulmonary manifestations (19.2% airway disease and 9.8% pulmonary involvement). Ten patients presented both. Sociodemographic characteristics were: mean age 59.5 years (SD: 11.46), 94.9% women and 19.6% smokers or former smokers. Patients with pulmonary manifestations had higher ESSDAI score (6 (SD 6) vs 4 (SD 5)), prolonged disease duration (10.05 years (SD: 7.15) vs 7.7 (SD 6.3)) and were ANA positive more frequently (94.9% vs 62.2%). Airway involvement preceded or occurred at the time of diagnosis in 46.4% of patients. Pulmonary involvement occurred 5 years after the diagnosis of pSS in 37.2% of them. [RS1] Twenty-nine patients (6.6%) were diagnosed with ILD. The most frequent radiological patterns were: Non-Specific Interstitial Pneumonia n=14, Usual Interstitial Pneumonia n=5, Lymphocytic Interstitial Pneumonia n=5 and Cryptogenic Organised Pneumonia n=2. Stepwise multivariate analysis was performed including the following variables: sex, age, laboratory findings, disease duration, smoking and ESSDAI. Disease duration (OR of 1.05 (95% CI, 1.006–1.083)), ESSDAI score (OR of 1.044 (95% CI, 1.006–1.083)) and positivity for ANA (OR of 3.725 (95% CI, 1.141–12.159)) were found to be associated factors with pulmonary involvement in pSS.

Conclusions: Prevalence of pulmonary manifestations in this cohort of pSS patients is substantial due to both airway disease and pulmonary involvement. Disease duration, activity of pSS according to ESSDAI score and ANA positivity were factors associated with the development of pulmonary manifestation.

Disclosure of Interest: None declared

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FRI0359 ROUTINE CLINICAL PATHOLOGY MEASUREMENTS ARE ASSOCIATED WITH RISK OF ORGAN DAMAGE ACCRUAL IN SLE

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Background: Prevention of permanent organ damage, a major predictor of morbidity and mortality, is a key goal in the treatment of SLE. Physician-measured disease activity scores, which entail some subjectivity, are associated with damage accrual risk, but there have been few studies of objective measures as indicators of organ damage risk. Routine pathology laboratory measurements provide objective biological data, but their association with damage accrual in SLE has not been studied.

Objectives: To evaluate the association of objective pathology laboratory measurements with risk of organ damage accrual in SLE.

Methods: A dataset of SLE patients between 2007–2017 from the Australian Lupus Registry and Biobank was studied. Variables recorded prospectively included disease activity (SLEDAI-2k), drug treatment and 16 routine pathology measurements at each visit, and organ damage (SLICC-SDI) annually. Longitudinal patient data was split into annual periods, and each visit classified as being either in a "transition" or "non-transition" period based on whether SDI increased during that period. Time adjusted means (TAMs) of the variables were calculated for each period, and multivariable logistic regression analysis of the association with being in a "transition" period (adjusting for age, gender, race, previous organ damage and prednisolone dose) was performed, with Holm-Bonferroni correction. An "odds ratio plot" was generated to depict the effect on risk of organ damage accrual at each threshold of the continuous variables.

Results: 893 periods, comprising 5082 visits from 245 patients (85.6% female, 50.2% Caucasian), were analysed. Five out of 16 laboratory variables: estimated glomerular filtration rate (eGFR), creatinine ($p<0.01$), urine protein:creatinine ratio ($p<0.01$), ESR ($p<0.001$), and haemoglobin ($p<0.001$) were significantly associated with risk of damage increase. Moreover, the odds of damage increase were approximately proportional to the deviation of each of these variables from its respective normal range. SLEDAI-2k was also significantly associated with damage increase ($p<0.001$), but the association of SLEDAI-2k with damage did not exhibit this proportionality.

Abstract FRI0359 – Figure 1. Ln (natural log) odds ratio for damage transition vs time-adjusted mean of laboratory variables. Red region (95% CI) lying above the $y=0$ line indicates the risk is statically significant ($p<0.05$). Regression lines (blue) suggest the risk of damage increase is approximately proportional with the distance from normal pathology measure range.

Conclusions: Routine pathology measures were found to be proportionally associated with organ damage risk in SLE. The potential for the use of these measures as biomarkers, for example to generate an organ damage risk calculator for SLE, warrants further research.

Disclosure of Interest: None declared

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FRI0360 DISEASE SEVERITY OF PROLIFERATIVE LUPUS NEPHRITIS IN MAGHREBIANS

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Background: The negative influence of African-American ethnicity on the prognosis of lupus nephritis (LN) is well known but – to the best of our knowledge – the impact of Maghrebian ethnicity has never been evaluated, although the disease is purported to be quite prevalent and severe in North Africa.

Objectives: To study the influence of Maghrebian ethnicity on the clinical and pathological presentation of LN, the renal relapse rate, the renal and overall survival and the predictive value of an early proteinuria decrease for good long-term renal outcome in this population compared to native Europeans.

Methods: We retrospectively reviewed the files of an inception cohort of 194 patients with proliferative LN followed in 7 lupus centres belonging to three groups: Europeans living in Belgium/France (E; $n=111$), Maghrebians living in Europe, *in casu* Belgium/France (ME; $n=43$) and Maghrebians living in Morocco (MM; $n=40$). Baseline presentation was compared between these 3 groups but complete long-term outcome data were available only for E and ME patients.

Results: At presentation, clinical (gender, age, nephrotic syndrome, serum creatinine, eGFR, uP/C ratio) and pathological (ISN/RPS class) characteristics of LN did not differ between E, ME and MM patients. At one year, renal remission was met in 73%, 63% and 68% in E, ME and MM patients, respectively. Achievement of a target proteinuria below 0.7 g/day one year after treatment initiation was 76%, 63% and 68%, respectively. Nevertheless, while proteinuria measured at month 12 accurately predicted a serum creatinine value <1 mg/dl at 7 years in E patients, this was not the case in the ME group, in whom serum creatinine at month 12 performed better. Renal relapses were more common in ME patients (54%) than in E patients (29%) ($p<0.01$). Time to renal flare and to ESRD was shorter in ME patients compared to E patients ($p<0.0001$ and $p<0.05$, respectively) as shown in figure 1. At last follow-up, mean proteinuria, serum creatinine and eGFR did not differ between E and ME patients, nor did the percentage of patients who died or suffered from ESRD or permanent renal impairment.

Conclusions: Despite a similar disease profile at onset, the prognosis of LN is more severe in Maghrebians living in Europe compared to native Europeans, with a higher relapse rate and a shorter time to ESRD.

Disclosure of Interest: None declared

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FRI0361 PREGNANCY OUTCOMES AND THERAPY IN SYSTEMIC LUPUS ERYTHEMATOSUS: RESULTS FROM OUR 30 YEARS' EXPERIENCE PREGNANCY CLINIC

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Background: The outcome of Systemic Lupus Erythematosus (SLE) pregnancies has dramatically improved thanks to pregnancy planning, multidisciplinary management and close monitoring during pregnancy. In our experience, programmed pregnancies in SLE patients had similar rates of pregnancy losses as compared to general obstetric population, but there are still open issues on some pregnancy complications that more frequently affect SLE patients.

Objectives: To analyse the obstetric outcome of SLE patients, according to specific therapy received during pregnancy.

Methods: A monocentric, retrospective study of 98 SLE patients with a total of 134 pregnancies followed prospectively by multidisciplinary team (1987–2015). Adverse Pregnancy Outcomes (APOs) were defined as one of the followings: premature miscarriage (<10 th week), intrauterine fetal death (>10 th week), perinatal death (<30 th day of life), severe preterm birth (<34 th week) and preterm birth (between 34th–36th weeks). We also evaluated the frequency of other pregnancy complications such as preterm premature rupture of membranes (pPROM) and pre-eclampsia (PE).

Results: Among the 134 pregnancies (including 3 twin pregnancies), flares occurred in 10 (7.5%) and APOs in 39 (29.1%) cases (table 1). pPROM complicated 9 pregnancies, all resulted in preterm deliveries, including 3 severe preterm birth; PE complicated 6 pregnancies resulting in 2 preterm birth, 1 intrauterine fetal death, 1 perinatal death and 2 term birth. The rates of APOs, pPROM and PE were compared according to receiving or not a specific therapy: hydroxychloroquine (HCQ), low dose aspirin (LDA), immunosuppressant (IS) during the overall pregnancy and corticosteroids >35 mg/week (CS) during the 1 st, the 2nd and the 3rd trimester. No statistical significant association was found between a specific therapy and the rate of PE. HCQ and LDA did not significantly affected the rate of APOs or pPROM while pregnancies exposed to IS showed a higher frequency of APOs (47% vs 20%, $p.0003$), in particular premature miscarriages (16% vs 2%, $p.0007$). Pregnancies exposed to CS had higher frequency of APOs (1 st trimester 44% vs 28%, $p.015$; 2nd trimester 36% vs 13% $p.004$; 3rd trimester 34% vs 14%, $p.019$). Considering only the 120 pregnancies resulted in live birth, those exposed to CS had higher frequency of preterm birth (1 st trimester $p.006$; 2nd trimester $p.023$; 3rd trimester $p.011$) (table 2). In particular, pregnancies exposed to CS in the 1 st trimester had higher frequency of preterm birth on 34th–36th w ($p.017$), while pregnancies exposed in the 3rd trimester had a higher frequency of preterm birth before 34th w ($p.038$). Furthermore, a higher frequency of pPROM was observed in those exposed to CS (1 st trimester $p.001$; 2nd trimester $p.003$; 3rd trimester $p.001$).