Conclusions: The most common haematological disorders in pSS patients are leukopenia, and cytopenia in pSS patients might be related to disease activity.

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AB0638 CLINICAL SIGNIFICANCE OF ESR IN CHINESE PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: During the process of systemic lupus erythematosus (SLE), disease flare and infection are often accompanied by each other and always pose a major challenge to clinical treatments. Although erythrocyte sedimentation rate (ESR) has been tested in SLE patients for many years, there is still a lack of consensus on its value.

Objectives: To validate the value of ESR in Chinese SLE patients at the time of their first admission and to determine whether it is related to a poor outcome.

Methods: Clinical data of patients with ESR tested on their first admission were extracted from our SLE database; (Feng et al. *PLoS ONE* 2016;11(12): e0168619) and analysed for the relation with disease activity (SLEDAI), infection status, organ involvements and survival situation. To determine the risk of ESR for long-term mortality, cumulative survival was illustrated with the Kaplan-Meier plot and factors were compared using the Log-rank test.

Results: Totally 1225 patients were included in this study, of which 92.2% were female and the median age at admission was 34.3 years. The most often seen organ involvements were mucocutaneous (66.4%), musculoskeletal (55.0%), renal (51.7%) and hematologic (45.2%) respectively. ESR levels were correlated with SLEDAI scores ($r=0.145$, $p=0.000$), but not elevated in patients with infections. Patients with cardiopulmonary, renal or hematologic impairments had higher ESR levels (all $p<0.05$). Subgroup analysis showed that serositis, renal insufficiency and anaemia might be responsible for the respective organ involvement. The ten year survival rates for patients with elevated ESR was 80.57%, lower than that of 88.62% for patients with normal ESR ($p<0.01$) (figure 1).

Abstract AB0638 – Figure 1. Cumulative survival rates for patients with elevated or normal ESR at first admission

Conclusions: High ESR levels in SLE patients are associated with active disease and specific organ involvements, and may predict a poor prognosis. It should be checked routinely for the monitoring of SLE patients.

Disclosure of Interest: None declared

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AB0639 RISK OF MORTALITY IN SJOGREN'S SYNDROME AFTER 1ST ADMISSION

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Background: The long-term prognosis of patients with SS is unclear. Population-based studies have shown conflicting evidence regarding relative mortality in SS.

Objectives: There is conflicting evidence regarding prognosis in patients with SS (pSS). The aim of this study was to estimate the risk factors of mortality in patients with SS through a in hospital review.

Methods: Through a review of databases through October 2002 till 2016, we identified cohort studies reporting relative risk (compared with standardised population), risk factors and causes of mortality in patients with SS.

Results: We identified 695 (83.2% females) with SS, of whom 88 patients died over a median average follow-up of 13 years. Leading causes of mortality were infections; Risk factors associated with increased mortality were advanced age at diagnosis [HR 1.045 (95% CI 1.024, 1.067), male sex [RR 2.18 (95% CI 1.45, 3.27)], associated with SLE [HR 2.448 (95% CI 1.108, 5.406)], diabetes [HR 1.986 (95% CI 1.125, 3.505)]

Abstract AB0639 – Table 1

	Regression coefficient	P value	HR	95.0% CI for HR	
				Lower	Upper
Gender	0.173	0.568	1.189	0.657	2.152
Age	0.044	0.000	1.045	1.024	1.067
BMI	-0.051	0.075	0.950	0.898	1.005
RA	0.245	0.576	1.277	0.541	3.017
SLE	0.895	0.027	2.448	1.108	5.406
Diabetes	0.686	0.018	1.986	1.125	3.505

Conclusions: After first admission, the risk factor for mortality include old age, associated with SLE and diabetes. These require close follow-up.

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AB0640 IMPLAUSIBLE ANTI-SMITH ANTIBODY IS NOT IMPLAUSIBLE TO AUTOIMMUNE DISEASE IN CHINESE POPULATION USING THE EUROIMMUN LINE IMMUNOASSAYS

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Background: Anti-Sm antibody is important test for lupus. In China, many labs detected anti-Sm using Euroimmun line immunoassays (LIA) kit, which mixture with purified Sm and RNP antigens as target antigens in Sm/RNP band and purified Sm antigens in Sm band. On the instruction, anti-Sm results should be determined according to the 2 bands. That is divided as true anti-Sm positive cases (having positive Sm and Sm/RNP bands) and implausible cases (having Sm band without Sm/RNP band), the value of implausible anti-Sm is not very clear now.

Objectives: We aimed at investigating the clinical value of the implausible anti-Sm in Chinese population.

Methods: Total of 39 766 patients were analysed for anti-Sm antibody using the EURO lineimmuno assay kit, of which 1208 cases are positive for anti-Sm. All cases with positive anti-Sm were divided into true anti-Sm group and implausible group according to the result of Sm/RNP band. The proportion of clinical diagnosis including autoimmune diseases (AIDs) and non-immune diseases (NAIDs) and the level of some clinical serum indexes were retrospectively analysed for the implausible anti-Sm cases.

Results: Implausible anti-Sm were evidenced in 271/1208 (22.42%) of all positive anti-Sm cases. Among patients with positive anti-Sm, 177 cases have definitive diagnoses (65.31%, 177/271), with autoimmune diseases accounting for 68.36% (121/177), of whom 96 had systemic lupus erythematosus (SLE) (79.34%). In addition, there are 5 implausible cases with rheumatoid arthritis (RA), 3 with Sjogren syndrome (SS) and 10 with mixed connective tissue diseases (MCTDs). The titer of antinuclear antibodies (ANA) in patients with implausible anti-Sm is lower than ones with true anti-Sm. Implausible group have the same gender ratio, mean onset age and frequency of autoantibodies with true group. The prevalence of one of NAIDs, kidney disease, was significantly lower in implausible group than in true group ($X^2=3.841$, $p=0.05$).

Conclusions: Implausible anti-Sm have great diagnostic value in AIDs just as true anti-Sm. Patients with implausible anti-Sm have less incidence of evolving to autoimmune injury and kidney injury. Patients with implausible anti-Sm but without autoimmune diseases may be potential autoimmune disease victims.

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AB0641 CORRELATION BETWEEN PHYSICIANS AND PATIENTS IN THE ASSESSMENT OF DISEASE ACTIVITY IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: In the assessment of systemic lupus erythematosus (SLE), laboratory data and clinical findings have been more focused than patient-reported outcomes which reflect quality of Life. Previous studies showed discrepancy between patients and physicians in assessments of disease activity in SLE.¹ The Systemic Lupus Activity Questionnaire (SLAQ), a lupus disease activity index which consisted of only patient reported outcomes, and SLE Disease Activity Index 2000 (SLEDAI-2K) were poorly correlated.²

Objectives: We aimed to investigate the correlation between SLAQ and SLEDAI-2K scores in those who had discordance between patients' VAS and physicians' VAS or not.

Methods: Both SLEDAI-2K and SLAQ were routinely measured at every outpatient visit in all SLE patients. We analysed the data between 9/12/2017 and 12/31/2017. Patients were divided into concordance (|patients' VAS-physicians' VAS| <25) or discordance group (|patients' VAS-physicians' VAS| ≥25).³ We measured correlation between SLAQ score vs SLEDAI-2K or SLEDAI-2K-nolab scores by Spearman's correlation in the concordance group and the discordance group. Comparison between the concordance group and the discordance group were performed using chi-squared test for categorical variables and Student t-test, Welch's t-test or Mann-Whitney U test for continuous variables.

Results: Total 130 patients were analysed; 91% of female, a mean age (SD) of 44¹⁵ years, steroid use of 91%, immunosuppressant use of 54%, HCQ use of 70%. Median SLAQ, SLEDAI-2K and SLEDAI-2K-nolab scores were 4 [IQR: 2–7], 4 [IQR: 2–4] and 0 [IQR: 0–2], respectively. Among them, 86 (66%) were classified in the concordance group. The SLAQ scores were weakly correlated with the SLEDAI-2K scores ($\rho=0.228$, $p=0.009$), and with SLEDAI-2K-nolab scores ($\rho=0.352$, $p<0.001$). In the concordance group, the SLAQ scores correlated with SLEDAI-2K scores ($\rho=0.327$, $p=0.002$) and SLEDAI-2K-nolab scores ($\rho=0.523$, $p<0.001$). The pain VAS and RAPID3 in the discordance group were significantly higher than those in the concordance group (30.77±26.54 vs 10.71±14.31, $p<0.001$, 8.11±5.87 vs 2.97±3.23, $p<0.001$, respectively). In the discordance group, the SLAQ scores were not correlated with SLEDAI-2K scores ($\rho=-0.029$, $p=0.849$) and with SLEDAI-2K-nolab scores ($\rho=-0.083$, $p=0.957$).

Abstract AB0641 – Table 1. LLDAS: Lupus low Disease Activity State *Student t-test **Welch's t-test †Mann-Whitney U test

	concordance group(n=86)	discordance group(n=44)	p value
Age (mean, SD)	41.74 (14.74)	49.00 (15.63)	0.010*
Sex (female) (%)	78 (90.7)	40 (90.9)	1.000
Disease duration (year, mean, SD)	10.78 (9.47)	12.18 (10.75)	0.447*
Antimalarial (%)	61 (70.9)	30 (68.2)	0.903
Immunosuppressant (%)	47 (54.7)	23 (52.3)	0.943
PSL doses (mean, SD) (mg)	5.13 (4.48)	5.59 (5.95)	0.629†
LLDAS (%)	48 (55.8)	22 (50.0)	0.658
MDHAQ (mean, SD)	0.20 (0.55)	0.33 (0.46)	0.015†
Pain (100mm VAS) (mean, SD)	10.71 (14.31)	30.77 (26.54)	<0.001**
Patient global (100mm VAS) (mean, SD)	14.43 (15.72)	39.57 (23.25)	<0.001**
Physician global assessment (100mm VAS) (mean, SD)	15.64 (13.64)	15.07 (15.39)	0.829*
RAPID3 (mean, SD)	2.97 (3.23)	8.11 (5.87)	<0.001**
SLAQ score (mean, SD)	4.63 (3.93)	6.16 (4.89)	0.056*
SLEDAI-2K (mean, SD)	3.50 (3.14)	3.82 (2.90)	0.575*
SLEDAI-2K-nolab (mean, SD)	0.92 (2.22)	1.73 (2.68)	0.030†

LLDAS: Lupus low Disease Activity State *Student t-test **Welch's t-test †Mann-Whitney U test

Conclusions: The correlation between SLAQ vs SLEDAI-2K or SLEDAI-2K-nolab scores was exhibited in the concordance group. Musculoskeletal pain may be associated with the discordance between patients' and physicians' assessment.

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AB0642 GLUCOCORTICOID INTAKE, HYPERGLYCEMIA AND OSTEOPOROSIS IN PATIENTS WITH AUTOIMMUNE DISEASES

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Background: Autoimmune diseases (AID) are often treated with glucocorticoids. Glucocorticoids have a number of substantial side effects in human body, including hyperglycemia and osteoporosis.

Objectives: Our study was to investigate the use of glucocorticoid in patients with autoimmune diseases and its negative influence on blood glucose and osteoporosis in the patients who receiving glucocorticoid treatment.

Methods: Patients with autoimmune diseases were enrolled from July to December in 2017 in rheumatology department of the Third Affiliated Hospital of Sun Yat-sen University. Demographic information, family history, past medical history, and clinical information were collected by two rheumatologists, including years of having glucocorticoids for treatment, largest dose of methylprednisolone, current dose of glucocorticoids. Blood glucose, glycosylated haemoglobin, and bone mineral density was required. The Statistical Package for Social Sciences (SPSS) software version 21 was used for all data management and analysis.

Results: Of all the 75 patients, 15 (20%) were male patients. 14.7% had primary education, while 26.6% received education in university. Numbers of the patients were stated as follows. Lupus, 29; rheumatoid arthritis, 4; Sjogren's syndrome, 10; systemic sclerosis, 10; myositis, 4; mixed connective tissue disease, 1; autoimmune hepatitis, 1; vasculitis, 5; other diseases, 11. Mean age was 40.29±14.64 years. Mean disease duration was 4.74±6.62 years. 3 (4%) patients had family history of diabetes. 3 (4%) patients had past medical history of diabetes. Mean duration of taking glucocorticoids was 3.30±4.40 years. 13 (17.3%) of the patients underwent high dose of glucocorticoid intravenous pulse (120 mg to 1000 mg of methylprednisolone). Current dose of glucocorticoids was 5.30±3.96 tablets of methylprednisolone. Mean blood glucose was 4.61±0.92 mmol/L. Mean glycosylated haemoglobin was 5.46±0.84. 2 patients were found to have diabetes in this study. 5 other patients were found to have higher blood sugar than normal range (3.9–6.1 mmol/L, according to our laboratory). 14 (18.7%) of the patients had osteoporosis according to BMD scores. In 17 patients who had receiving glucocorticoids for more than five years, 3 (17.6%) patients were found to have higher