Abstract P178 Table 3 Treatment differences among JSLE patients

	Lupus nephritis	Without Lupus nephritis	p
Number of patients, n (%)	45 (36%)	89 (66.4%)	
Hydroxychloroquine, n (%)	43 (95.6%)	88 (98.9%)	0.295
Steroid treatment duration, (months)	31 (1.5- 84.5)	29.5 (9- 54.8)	0.834
MMF, n (%)	39 (86.7%)	43 (48.3%)	0.000*
MMF, months	42 (18.75- 94.5)	0 (0- 44)	0.000*
Cyclophosphamide, n (%)	22 (48.9%)	17 (19.1%)	0.001*
Cyclophosphamide, number of courses	0 (0- 3)	0	0.000*
Rituximab, n (%)	27 (60%)	29 (32.6%)	0.003*
Rituximab, number of courses	2 (0- 2)	0 (0- 1)	0.000*
Azathioprine, months	2.5 (0- 48.5)	10 (0- 41)	0.868
Methotrexate, months	0	0 (0- 0.75)	0.529
Tacrolimus, months	0	0	0.219
Belimumab, months	0	0	0.310

Numbers are medians (interquartile ranges) unless otherwise stated. MMF= mycophenolate mofetil. *p<0.05 is significant

bone mineral density (table 2). Factors associated with low bone mineral density in a univariate logistic regression analysis were: the use of mycophenolate mofetil ($p=0.021$) and the presence of LN ($p=0.007$), while LN also associated with low bone density ($p=0.008$) in a multivariate analysis. The skin involvement was the most common clinical manifestation in both JSLE patient groups. The treatment was more aggressive in patients with LN, including the use of cyclophosphamide, mycophenolate and rituximab, but there was no difference regarding the length of the steroid treatment (table 3). The majority of the patients (67%) had one flare of nephritis and the number of flares ranged from 2 (13%) to 12 (2.2%) for the rest of the patients in this cohort with disease duration ranging from 8–12 years. The class of nephritis was reported in 34 out of 45 patients, and focal lupus nephritis (class III) was the most common type (44%). There were no statistical significant differences in the baseline characteristics or treatments among the different classes of LN.

Conclusion Low bone mineral density is common in patients with JSLE³, but this is the first study highlighting the association of low bone density with LN and the lack of association with the total duration of steroid treatment or other clinical manifestations.

REFERENCES

- Ambrose N, et al. Differences in disease phenotype and severity in SLE across age groups. *Lupus*. 2016;**25**(14):1542–50.
- Smith EMD, et al. Clinical predictors of active LN development in children- evidence from the UK JSLE Cohort Study.
- Compeyrot-Lacassagne S, et al. Prevalence and etiology of low bone mineral density in Juvenile Systemic Lupus Erythematosus.

P179 SYSTEMIC LUPUS ERYTHEMATOSUS, A PILOT STUDY OF A NEW DISEASE ACTIVITY SCORE

¹Daphna Paran, ¹Monique Ben-Am, ¹Liran Mendel, ¹Ari Polachek, ¹Victoria Furer, ¹Ofir Elalouf, ¹Jonathan Wollman, ²Shaye Kivity, ³Nancy Agmon-Levin. ¹Dept. of Rheumatology, Tel Aviv Medical Center; ²Dept. of Medicine 'A', Sheba Medical Center; ³Clinical Immunology, Angioedema and Allergy Unit, Center for Autoimmune Diseases, Sheba Medical Center and Tel-Aviv University, Israel

10.1136/lupus-2020-eurolupus.221

Background SLE complexity and unpredictability challenge assessment of disease activity. Current scoring instruments are limited in ability to detect changes in activity over time and too cumbersome for daily practice. We constructed a new disease activity score, including physician and patient assessment, aiming to simplify and improve assessment in daily practice, and possibly serve as a tool for clinical studies.

Methods The new instrument is comprised of 6 visual analogue scales, separately addressing the physician's global assessment and 5 organ systems: mucocutaneous, musculoskeletal, cardiorespiratory, renal and neuropsychiatric systems, and 5 visual analogue scales addressing patients' assessment of disease activity and adherence to therapy. Laboratory values and medications are recorded. Aiming to assess the reliability and validity of the new score, as well as its sensitivity to changes in disease activity, 4 paper cases, including 2 visits per case, were constructed. Each visit was scored by 5 experienced rheumatologists, using BILAG, SLEDAI, LFA-REAL and our proposed score.

Results The inter-rater reliability of the new score was good for all systems, both for single visit scores and for change in disease activity between 2 consecutive visits (ICC [2,1] range 0.75–0.95), except for changes in activity in the renal system (0.59). The inter-rater reliability values of the new score were comparable with those of the BILAG and the LFA-REAL instruments. The construct validity of the new score was good for single visit scores (Spearman correlation coefficients range 0.48–0.94). Correlation of our proposed score with the BILAG, was good when scoring the mucocutaneous, musculoskeletal and cardiorespiratory systems (0.66, 0.75, 0.83, respectively) but poor when scoring the renal system (0.11).

Conclusions This paper case evaluation of the new disease activity score suggests a promising and simple tool, with overall good reliability and construct validity.

P180 CORRELATION BETWEEN PATIENT REPORTED OUTCOMES OF HEALTH-RELATED QUALITY OF LIFE AND CLINICAL ACTIVITY IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

¹Elena Grau-García, ¹Samuel Leal-Rodríguez, ¹Cristóbal Pávez-Perales, ¹Cristina Alcañiz-Escandell, ¹Inés Cánovas-Olmos, ¹Inmaculada Chalmeta-Verdejo, ¹Marta De-la-Rubia-Navarro, ¹Jorge Juan Frago-Gil, ¹Roxana González-Mazarío, ¹Luis González-Puig, ¹José Ivorra-Cortés, ¹Isabel Martínez-Cordellat, ¹Carmen Nájera-Herranz, ¹Rosa Neguerolles-Albuixech, ¹José Eloy Oller-Rodríguez, ¹Francisco Miguel Ortiz-Sanjuán, ¹Elvira Vicens-Bernabeu, ²Daniel Hervás-Marín, ¹José Andrés Román-Ivorra. ¹Rheumatology Dept., Hospital Universitario y Politécnico de La Fe, Valencia; ²Biostatistics Unit. Instituto de Investigación Sanitaria La Fe, Valencia, Spain

10.1136/lupus-2020-eurolupus.222

Background/Purpose Patient-Reported Outcomes (PROs) allow us to know how the disease could affect patients, and maybe could not be detected by clinical measures. Among these, PROs of health-related quality of life (PRO-QL) represents patient evaluation of its health status. In systemic lupus erythematosus (SLE) patients, the heterogeneous inflammatory symptoms can affect the health-related quality of life in different ways.

We aimed to measure the PRO-QL in SLE patients and correlate them with the clinical activity of the disease.

Methods A cross-sectional observational study with SLE patients diagnosed according to SLICC 2012 criteria was performed. SLEDAI score was carried out, and patients full-filled

questionnaires of fatigue (FACIT-FATIGUE), quality of life (EQ-5D-5L), disability (HAQ) and a Global Health Status Scale (GHS) (0–100). Biostatistical analysis was performed using the multivariate analysis of variance by Pillai test.

Results 54 SLE patients (91.84% female) with a mean age at diagnosis of 27.55 ± 13.21 years and a mean time of disease evolution of 20.45 ± 9.7 years were included. Mean SLEDAI score was 6.63 ± 6.89 , with a 37.04% of patients with SLEDAI > 6. The 64.66% of patients were under glucocorticoid treatment, 38.77% under immunosuppressants (methotrexate, azathioprine or mycophenolate) and 51.02% under antimalarials.

Patients showed a mean score of 34.02 ± 12.38 in FACIT-FATIGUE, 0.72 ± 0.26 in EQ-5D-5L, 0.62 ± 0.71 in HAQ and 64.02 ± 25.93 in GHS.

Statistical analysis showed correlation among high SLEDAI scores and low scores of EQ-5D-5L, FACIT-FATIGUE and GHS, and an increment in HAQ, considering as correcting factors the age, years of disease evolution, glucocorticoid treatment, antimalarials and immunosuppressants ($P=0.0107$).

Conclusions We observed a correlation between PROs-QL fulfilled by SLE patients with the clinical activity of the disease, independently of glucocorticoid treatment, antimalarials and immunosuppressants, the age and the disease evolution.

P181 COMPARISON OF SLEDAI-2K AND SLEDAI-2KG (GLUCOCORTICOID) INDEXES IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS (SLE)

¹Selma Sari, ²Bahar Artim Esen, ²Ahmet Gül, ²Lale Öcal, ²Murat İnanç. ¹Dept. of Internal Medicine, Istanbul Faculty of Medicine, Istanbul University, Istanbul; ²Dept. of Internal Medicine, Division of Rheumatology, Istanbul Faculty of Medicine, Istanbul University, Istanbul, Turkey

10.1136/lupus-2020-eurolupus.223

Background Disease activity measurement in SLE can be performed with SLEDAI based on clinical and laboratory findings. The new SLEDAI-2K-glucocorticoid index (SLEDAI-2KG) developed from SLEDAI-2K calculates disease activity by taking into account the amount of glucocorticoids used. In this cross-sectional prospective study, two indexes were compared in consecutive SLE patients.

Methods Seventy-nine SLE patients were included into the study. Disease activity was evaluated using SLEDAI-2K and SLEDAI-2KG. Patients were grouped as SLEDAI = 0 (group 1), lupus low disease activity status (LLDAS) (group 2) and active disease (group 3). LLDAS was defined as: (SLEDAI)-2K ≤ 4 , with no activity in major organ systems and no haemolytic anaemia or gastrointestinal activity; no new lupus disease activity; PGA (scale 0–3) ≤ 1 ; a current prednisolone dose ≤ 7.5 mg daily; and stable maintenance doses of immunosuppressive drugs and approved biological agents.

Results Table 1 shows clinical features of SLE patients. Eighty-six percent of the patients were female. Median age 34 (range 18–74), median disease duration 36 (0–436) months. Thirty-five percent of the patients had renal activity, 7% had malar rash, 12% had alopecia, 2 (2.5%), 8% had thrombocytopenia, 8% had leucopenia, 3.8% had fever. Sixty-one percent of the patients had hypocomplementemia and 29% had anti-dsDNA positivity. Glucocorticoids were used by 63 patients and the median prednisone dose was 16 (0–75) mg. The median of SLEDAI-2K score of 79 patients was 4 (range 0–24) and the median of SLEDAI-2KG score was 7

Abstract P181 Table 1 Demographic and clinical characteristics of SLE patients

	SLE, n=79
Male/Female,	68/11
Age, years (median, range)	34 (18–74)
Disease duration, months (median, range)	36 (0–436)
Manifestations	
Vasculitis, n (%)	10 (12,7)
Arthritis, n (%)	5 (6,3)
Renal activity, n (%)	28
Proteinuria, n (%)	26
Hemolytic anemia, n (%)	6 (7,5)
Trombocytopenia, n (%)	7 (8,9)
Autoantibodies	
ANA, n (%)	74 (93,7)
Anti-dsDNA, n (%)	23 (29,1)
C3 levels (mg/dl, median, range)	81 (34–185)
C4 levels (mg/dl, median, range)	2 (2–42)
SLEDAI score (median, range)	4 (0–24)
SLEDAI-2KG score (median, range)	7 (0–25)
Treatment	
Prednisone, n (%)	63 (79,7)
Azathioprine, n (%)	21 (26,6)
Antimalarial, n (%)	52 (62,8)
Mycophenolate, n (%)	21 (26,6)

(range 0–25). Significant positive correlation was found between SLEDAI-2K and SLEDAI-2KG scores ($r=0,93$, $p<0,01$). When SLEDAI-2K and SLEDAI-2KG were compared, the proportion of patients with disease activity 0 was 24% and 9%, LLDAS 20% and 27%, and active patients 56% and 64%, respectively.

Conclusion Although there was a significant correlation between SLEDAI-2K and SLEDAI-2KG, more patients were defined as active with SLEDAI-2KG. Considering the importance of reducing glucocorticoid dose in clinical trials in the assessment of treatment response, SLEDAI-2KG may provide a more precise treatment response. Prospective studies are required to investigate the importance of SLEDAI-2KG in long-term prognosis of SLE patients.

P182 ORGAN DAMAGE IN CROATIAN COHORT OF PATIENTS WITH CHILDHOOD ONSET SYSTEMIC LUPUS ERYTHEMATOSUS

¹Nastasia Kifer, ¹Mario Sestan, ¹Emilija Hosticka, ¹Maja Novoselec, ¹Mateja Batnocić Varga, ¹Ivan Padjen, ¹Marijan Frković, ²Domagoj Kifer, ¹Branimir Anić, ¹Drago Batinić, ¹Kristina Potocki, ¹Ivan Malčić, ¹Marija Jelusic. ¹University of Zagreb School of Medicine, Zagreb; ²Faculty of Pharmacy and Biochemistry, University of Zagreb, Zagreb, Croatia

10.1136/lupus-2020-eurolupus.224

Background Our aim was to explore the correlation between the Systemic Lupus Erythematosus Disease Activity Index (SLEDAI 2K) at the time of diagnosis and the SLICC/ACR damage index (SDI) of patients at their last follow up, to examine organ damage and to predict the risk of organ damage occurrence in time.

Methods The retrospective study included children with childhood onset systemic lupus erythematosus (cSLE) treated from 1991 to 2017 at University Hospital Centre Zagreb.