

derived ROS generation in CD4⁺, CD8⁺, and CD19⁺ lymphocytes. Next, we sought to evaluate the influence of soluble serum mediators on cellular function. Healthy PBMCs were isolated and cultured with 10% serum from either SLE patients (n=17) or healthy donors (n=12), before quantify ROS with FC. To evaluate CD4⁺ T cell derived cytokines on cellular metabolism, following magnetic bead isolation, CD4⁺ T cells were stimulated with anti-CD3/CD28 for 24 hours (HC=13, SLE=13). Following this, healthy PBMCs were culture in this cellular supernatant and ROS was again quantified by FC. Finally real-time CD4⁺ T cell mitochondrial metabolic function was evaluated using Seahorse Respirometry MitoStress Test.

Results When adjusted for mitochondrial mass, individual mitochondria-derived ROS production was markedly increased in CD4⁺, CD8⁺, and CD19⁺ cells in SLE when compared with HC (figure 1A). Following co-culture with donor serum, healthy PBMCs cultured with SLE serum showed significantly higher ROS generation in CD4⁺, CD8⁺ and CD19⁺ lymphocytes when compared with HC (figure 1B). Following co-culture with supernatant from stimulated CD4⁺ T cells; CD8⁺ and CD19⁺ cells cultured with SLE CD4⁺ T cell supernatant showed higher ROS formation than those cultured with HC CD4⁺ supernatant (figure 1C). Seahorse Respirometry indicated higher basal CD4⁺ respiration (figure 1D), increased proton leak (figure 1E), and enhanced mitochondrial ATP production (figure 1F) in SLE, suggesting closer proximity to maximal function with limited upregulation potential.

Conclusion These findings underscore the significance of abnormal immune cell metabolic pathways in SLE, highlighting potential therapeutic targets. Targeting CD4⁺ T cell mitochondrial dysfunction may offer a novel approach for future therapeutic intervention.

P121 ONLINE SUPPORT GROUP FOR LUPUS PATIENTS: THE TUNISIAN EXPERIENCE

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Objective According to studies, Patient support groups (PSG) have shown effectiveness in improving patients quality of life, hence the recommendation to include them in patient therapeutic education programs. In Tunisia, a group dedicated to patients with Systemic Lupus Erythematosus (SLE) was created a few years ago.

The aim of our work was to assess the impact of PSG for Tunisian SLE patients.

Methods A qualitative cross-sectional study carried out in June 2023, based on a Google Forms questionnaire distributed in the Facebook group supporting SLE patients 'Let's talk about Lupus: Tunisia'. Answers were open and treated anonymously. Participation was voluntary.

Results 22 members participated. They were all women. The average age when participating was 38.5 years [20;67]. The duration of disease progression was 11.76 years [0.5;26]. The average group membership duration was 2.76 years [0.5;6]. Answers to the question 'Why did you join the group?' were: seeking moral support (n=10); better understanding of SLE (n=9); Looking for people who are going

through the same experience (n=5); helping others (n=4); contributing to donations of medicines (n=1). Most reported answers on 'how did the group help you?' were: not feeling alone (n=12); Better understanding of SLE (n=7); moral support (n=6); encouragement and positive vibes (n=4); no help (n=3); awareness regarding therapeutic adherence (n=2); Benefiting of medicines donations (n=2). Sixteen participants double-checked medical information communicated by members on other platforms or with their doctors. For the question 'what changed since you joined the group?', answers were: I learned that I can live with SLE (n=13); I understood that I am not alone (n=7); Lupus varies from a patient to another (n=5), Nothing (n=3). The group limitations reported were: the negative messages and false information that can be disseminated, the lack of commitment of some of the participants and doctors. Participants' expectations of doctors were: answering questions (n=20); correcting false information communicated by members (n=19); showing more psychological support (n=10); giving general advice on daily hygiene (n=8).

Conclusions The Tunisian PSG seems to partially meet its objectives. An active presence of the medical and paramedical professionals could support its role in awareness-raising and therapeutic education. Well-structured coordination between the group and medical societies could fulfil this need.

P122 SKIN DISEASE BURDEN IN SYSTEMIC LUPUS ERYTHEMATOSUS: DATA FROM A MONOCENTRIC COHORT

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Objective Skin involvement in Systemic Lupus Erythematosus (SLE) is still often a challenge for the rheumatologist, who must consider patients' perspective in order to ensure the best quality of care. The aim of the study was to evaluate the impact of skin involvement on Health-Related Quality of Life (HRQoL) in a monocentric cohort of SLE patients.

Methods This is a cross-sectional analysis of prospectively collected data of adult consecutive SLE patients (2019 EULAR/ACR criteria) with skin involvement. The following data have been collected for each patient: demographics and clinical data, SLEDAI-2K and SLICC-DI. Clinical evaluation of skin was performed using the Cutaneous LE Disease Area and Severity Index (CLASI), which we used to define skin disease activity and damage. At each assessment, patients completed the following Patient Reported Outcomes: LIT, SLAQ, FACIT-F, HADS and Skindex-16.

Results We included 109 assessments in 59 SLE patients during the period February 2021 – June 2023. Cohort characteristics are shown in table 1. CLASI activity assessment correlated positively with Skindex-16 scores ($rs \geq 0.307$, $p \leq 0.002$) and to a lesser extent with LIT ($rs = 0.231$, $p = 0.02$); CLASI damage correlated positively con LIT, HADS depression and Skindex-16 functioning subscales ($rs \geq 0.280$, $p \leq 0.006$) and negatively with FACIT-F ($rs = -0.305$, $p = 0.002$). Analysing potential differences in the impact of skin activity and damage on QoL, we noted that only the presence of active skin

Abstract P122 Table 1 Characteristics of the cohort

N° of patients	59
Female	52 (88.1%)
Age at study entry ¹ [years]	46 (33–56)
Disease duration at study entry ¹ [years]	12 (7–20)
Ethnicity: Caucasian/Asian/African-American	55 (93.2%)/3 (5.1%)/1 (1.7%)
Cutaneous subgroup: chronic (CCLE)/subacute (SCLE)/acute (ACLE)	28 (47.4%)/9 (15.3%)/22 (37.3%)
Ongoing organ involvement *	
Mucocutaneous	99/109 (90.8%)
Haematological	11/109 (10.1%)
Renal	4/109 (3.7%)
Articular	12/109 (11.0%)
Serositis	0
Neuropsychiatric	0
SLEDAI-2K ¹ *	4 (2–6)
SLICC-DI ¹ *	0 (0–1)
CLASI activity ¹ *	5 (2–8)
CLASI damage ¹ *	2 (0–8)
LIT ¹ *	22.5 (12.5–47.5)
SLAQ ¹ *	16 (11–26)
FACIT-F ¹ *	38 (28–43)
HADS anxiety ¹ *	6 (4–9)
HADS depression ¹ *	7 (4–10)
Skindex-16 symptoms ¹ *	37.5 (12.5–79.0)
Skindex-16 emotions ¹ *	55.7 (21.4–90.5)
Skindex-16 functioning ¹ *	31.7 (6.7–79.2)

¹ Median (IQR) * data on 109 assessments

Abstract P122 Table 2 Comparison of assessments based on the presence or absence of skin disease activity and damage

	Cutaneous activity			Cutaneous damage		
	Yes (N=99)	No (N=10)	p-value	Yes (N=63)	No (N=46)	p-value
SLEDAI-2K	5.05 (±3.22)	2.00 (±1.33)	<0.001	4.86 (±2.87)	4.64 (±3.68)	0.737
CLASI activity	7.73 (±6.90)	0 (±0)	<0.001	8.49 (±8.10)	4.96 (±4.17)	0.004
CLASI damage	4.42 (±6.3)	7.70 (±7.86)	0.229	8.10 (±6.63)	0 (±0)	<0.001
LIT	31.81 (±22.65)	21.80 (±17.68)	0.178	34.04 (±22.81)	25.94 (±20.94)	0.075
SLAQ	19.38 (±12.73)	13.50 (±2.12)	0.519	19.97 (±13.36)	18.35 (±11.80)	0.587
FACIT-F	33.80 (±12.24)	34.50 (±13.22)	0.865	32.20 (±12.59)	36.33 (±11.50)	0.100
HADS anxiety	6.79 (±3.76)	5.11 (±2.67)	0.195	6.46 (±4.27)	6.87 (±2.68)	0.569
HADS depression	7.24 (±4.42)	7.00 (±1.94)	0.773	7.73 (±4.55)	6.49 (±3.70)	0.149
Skindex-16 symptoms	48.18 (±34.73)	12.93 (±15.64)	<0.001	45.92 (±35.64)	43.18 (±34.22)	0.695
Skindex-16 emotions	59.20 (±33.98)	14.06 (±26.03)	<0.001	56.83 (±36.18)	52.07 (±35.45)	0.507
Skindex-16 functioning	44.27 (±36.16)	13.67 (±29.93)	0.011	43.14 (±37.52)	38.76 (±35.60)	0.550

disease seems to influence the patients' perception assessed with the Skindex-16, as illustrated in table 2. Considering the overall disease burden, we found significantly higher scores in all Skindex-16 subscales, LIT, SLAQ and HADS anxiety subscale in females compared to males ($p \leq 0.003$). We found no further differences in relation to gender and other demographic and clinical features.

Conclusions Skin disease is confirmed as a major determinant of HRQoL in SLE patients. While disease activity has a significant impact on patients' perception of skin symptoms, our data suggest that the presence of chronic skin damage, rather than activity, may have a more negative impact on HRQoL, significantly influencing the emotional sphere and the patient's perception of the burden of disease. Further studies are needed to confirm these preliminary findings.

P123 INCREASED SLE BURDEN IN PATIENTS OF LOWER ECONOMIC STATUS

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Objective To study the association between economic status and the lived experience of systemic lupus erythematosus (SLE) patients.

Methods Data on the economic status of participants in the Living with Lupus in 2020 (LWL2020) survey by Lupus Europe were analysed.¹ Participants were categorised into two groups: those frequently facing difficulties in paying bills (lower economic status - LES) and those never facing such challenges (Affluent), and the burden of SLE was compared between these 2 groups. 1172 patients 'occasionally facing difficulties' were ignored.

Results Among the 763 LES patients (96.2% women, mean age 44.6 ± 10.4) and 2052 affluent patients (96.2% women, mean age 46.3 ± 12.7) studied. Patients with lower ES faced a delayed SLE diagnosis (average additional delay: +0.9 years). 53.6% faced another diagnosis before SLE compared to 41.2% of affluent. Fibromyalgia (10.2% vs. 4.2%) and psychologic disorder (14.4% vs. 7.1%) prior diagnosis were largest differences. LES patients considered themselves less active than others of the same age due to lupus (84.9% vs. 65.1%), with SLE less often under control over the past 3 months (60.6% vs. 78.1%). They listed an average of 10.3 (± 3.6) symptoms compared with 7.9 (± 3.6) for affluent patients, with key increases in thrombosis (2.2x), Chest Pain (1.75x), depression/anxiety (1.67x), and Hematologic/anemia (1.63x). They were taking 5.9 (± 2.6) medications vs. 4.9 (± 2.3) for affluents, with key increases in anxiolytics/antidepressants (2.47x) and painkillers (1.43x). They rated all categories of access to treatments slightly lower, with an average of 3.09 (± 0.9) vs. 3.49 (± 0.8) (on a scale of 1 to 5) and faced lower health related quality of life in all 5 EQ5D dimensions (average burden of 2.98 ± 0.68 compared to 2.26 ± 0.71). Finally, their concerns about lupus progressing were substantially more frequent with 76.2% of high or very high worry ($>7/10$) compared to 54.9% for affluent patients.

Conclusions This analysis highlights a significantly worse lupus experience among patients of lower economic status. Diagnosis delay, increased number of reported symptoms, psychologic status, increased number of medications, lower activity level all contributed to a lower quality of life.