Conclusions Our analysis confirm that considering only traditional CV risk factors is not adequate to estimate real CV risk among SLE patients and that there is a lack of suitable scores. In our department, we have decided to refer our patients to a team of specialized cardiologists in order to identify patients with an increased CV risk and to perform a tight follow – up.

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PO.3.56 ANTI- RO/SSA ANTIBODIES AND ELECTROCARDIOGRAPHIC ABNORMALITIES IN SLE PATIENTS: PRELIMINARY DATA OF A MULTIDISCIPLINARY STUDY IN A MONOCENTRIC COHORT

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Purpose Cardiovascular involvement is common in patients with systemic lupus erythematosus (SLE) and changes in heart rhythm are frequent in addition to the manifestations included in the classification criteria (2019 ACR/EULAR). QTc-interval prolongation is a risk factors for serious adverse events and sudden cardiac death. Previous studies have identified specific therapy (e.g. hydroxychloroquine) and anti-Ro/SSA antibodies as risk factors.[1] The aim of our study is to estimate the prevalence of QTc prolongation in a monocentric cohort and to evaluate possible correlation with autoantibodies and therapies.

Methods An electrocardiographic study (ECG) was proposed to patients affected by SLE consecutively attending our Lupus Clinic from November 2021 to March 2022. All subjects were tested for anti-Ro/SSA antibodies. Exclusion criteria were: severe valvulopathies, hypertrophic or dilated cardiomyopathy, previous pacemaker or implantable cardioverter-defibrillators implants. QTc measurement was calculated using the Bazett's formula and prolongation was defined according to American Heart Association/American college of Cardiology recommendations (QTc>470 ms for males, QTc>480 ms for females).[2] Quantitative variables were compared with T-test.

Results From November 2021 to March 2022, 120/137 (87.56%) patients with SLE consecutively seen in the clinic, accepted to undergo an ECG : 109 females (90.8%), 11 (9.2%) males; 106 (88.3%) Caucasians (median age 53.2 [IQR 42.3–58.7], median disease duration 20.0 years [12.0–28.2]). Fifty-four (45%) patients were positive for anti-Ro/SSA antibodies. Median QTc was 408.4 [IQR 389.1–428.3] ms and only 2/120 (1.7%) had a prolonged QTc (one female anti-Ro/SSA negative and one female anti-Ro/SSA positive with respectively a QTc of 488 ms and 492 ms). Comparing QTc of anti-Ro/SSA positive patients to those of anti-Ro/SSA negative patients no statistical difference was observed (409.0 [390.1–427.2] ms vs 407.0 [389.2–430.4] ms; p=0,7907). Various other electrocardiographic alterations were found: 3 (2.5%) 1st degree atrioventricular block, 15 (12.5%) bundle branch blocks BBB (13 right BBB and 2 left BBB), 32 (26.7%) repolarization anomalies, 1 (1.0%) Wolff Parkinson White; none of these patients had a QTc prolongation.

Conclusions The preliminary results of this study show a lower prevalence of QTc prolongation compared to previous studies [1]with no differences between anti-Ro/SSA positive and anti-Ro/SSA negative patients. Further details will be available with data from 24hours ECG and a better characterization of anti-Ro/SSA antibodies (isotypes and titers).

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PO.3.57 CORRELATION BETWEEN DISEASE ACTIVITY AND ECHOCARDIOGRAPHIC PARAMETERS IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

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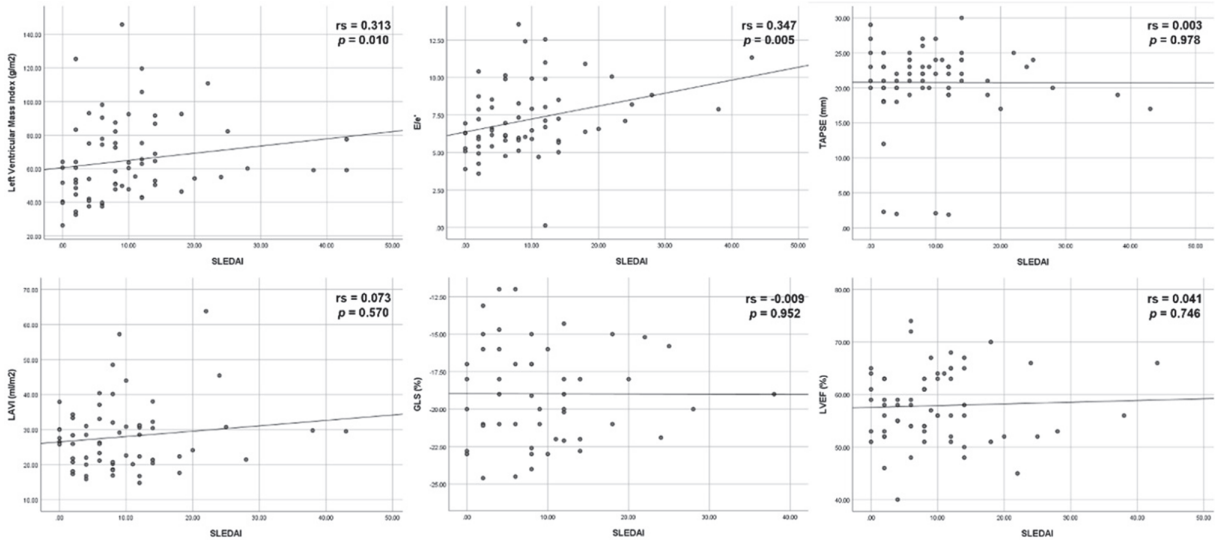
Purpose Patients with systemic lupus erythematosus (SLE) have an increased risk of developing a cardiovascular event than the general population, due to immunological factors and a systemic inflammatory state. We aimed to evaluate the association of the Systemic Lupus Erythematosus Disease Activity Index (SLEDAI) and echocardiographic parameters in SLE patients.

Methods This was a cross-sectional study. We recruited a total of 67 patients with SLE diagnosis according to the 2019 EULAR/ACR classification criteria, aged ≥18 years. Patients with a previous cardiovascular event (myocardial infarction, stroke or peripheral artery disease), another connective tissue

Abstract PO.3.57 Table 1 Demographic and clinical characteristics

Characteristics	SLE patients (n=67)
Age, years, median (IQR)	37.0 (24.0-42.0)
Women, n (%)	60 (89.6)
T2DM, n (%)	3 (4.5)
Hypertension, n (%)	14 (20.9)
Dyslipidemia, n (%)	4 (6.0)
Obesity, n (%)	9 (13.4)
Active smoking, n (%)	8 (11.9)
Disease duration, months, median (IQR)	72.0 (28.0-120.0)
SLEDAI, median (IQR)	8.0 (4.0-12.0)
Hydroxychloroquine, n (%)	59 (88.1)
Glucocorticoids, n (%)	54 (80.6)
LV mass index, g/m^2, median (IQR)	60.14 (47.69-77.77)
E/e', median (IQR)	6.58 (5.80-8.45)
LAVI, ml/m^2, median (IQR)	26.46 (20.71-31.26)
LVEF, %, mean ± SD	57.86 ± 6.76
GLS, %, mean ± SD	-18.97 ± 3.30
TAPSE, mm, median (IQR)	22.0 (20.0-24.0)

SLE, systemic lupus erythematosus; T2DM, type 2 diabetes mellitus; SLEDAI, Systemic Lupus Erythematosus Disease Activity Index; LV, left ventricular; E/e', the ratio between early mitral inflow velocity and mitral annular early diastolic velocity; LAVI, left atrial volume index; left ventricular ejection fraction; GLS, global longitudinal strain; TAPSE, tricuspid annular plane systolic excursion.



Abstract PO.3.57 Figure 1 Scatter plots of correlations between SLEDAI and echocardiographic parameters

disease, or pregnancy were excluded. A transthoracic echocardiogram was performed by two certified echocardiographers blinded to clinical information. Disease activity was assessed with SLEDAI. Distribution of quantitative variables was evaluated with the Kolmogorov-Smirnov test. Correlations between SLEDAI and echocardiographic parameters were assessed with Spearman's correlation coefficient (rs). A p-value < 0.05 was considered statistically significant.

Results Median age of SLE patients was 37 (24–42) years, 89.6% were women, and 20.9% had hypertension diagnosis. Median SLEDAI was 8 (4–12). Demographic and clinical characteristics are shown in Table 1. We found a moderate positive correlation between SLEDAI and left ventricular mass index (rs = 0.313, p = 0.010), and between SLEDAI and the ratio between early mitral inflow velocity and mitral annular early diastolic velocity (E/e') (rs = 0.347, p = 0.005) (Figure 1).

Conclusions Higher SLEDAI score was associated with higher left ventricular mass index and E/e'. An increased left ventricular mass index could lead to the development of left ventricular hypertrophy, and an increased E/e' could lead to the development of diastolic dysfunction, which are associated with higher risk of cardiovascular mortality. A transthoracic echocardiogram may be helpful to detect early cardiovascular abnormalities, especially in patients with high disease activity, and therefore, should be considered as part of the cardiovascular evaluation in this specific population.

PO.3.58 ASSOCIATION OF ANTI-DOUBLE STRANDED DNA ANTIBODY TITERS AND ECHOCARDIOGRAPHIC PARAMETERS IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

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Purpose Systemic lupus erythematosus (SLE) is a chronic inflammatory disease, characterized by the deposition of immunocomplexes in vital organs such as the heart, brain, and kidneys. High autoantibodies titers have been associated with a worse cardiovascular prognosis. Anti-double stranded DNA (anti-dsDNA) antibody has been associated with skin, brain and kidney injury, however, information about its association with cardiovascular risk is scarce. We aimed to evaluate the association between measure anti-dsDNA antibody titers and echocardiographic parameters in SLE patients.

Methods This was a cross-sectional study. We recruited a total of 67 patients with SLE diagnosis, according to the 2019

Abstract PO.3.58 Table 1 Demographic and clinical characteristics

Characteristics	SLE patients (n=67)
Age, years, median (IQR)	37.0 (24.0-42.0)
Women, n (%)	60 (89.6)
T2DM, n (%)	3 (4.5)
Hypertension, n (%)	14 (20.9)
Dyslipidemia, n (%)	4 (6.0)
Obesity, n (%)	9 (13.4)
Active smoking, n (%)	8 (11.9)
Disease duration, months, median (IQR)	72.0 (28.0-120.0)
Anti-dsDNA, median (IQR)	0.0 (0.0-160.0)
Hydroxychloroquine, n (%)	59 (88.1)
Glucocorticoids, n (%)	54 (80.6)
LV mass index, g/m^2, median (IQR)	60.14 (47.69-77.77)
E/e', median (IQR)	6.58 (5.80-8.45)
LAVI, ml/m^2, median (IQR)	26.46 (20.71-31.26)
LVEF, %, mean ± SD	57.86 ± 6.76
GLS, %, mean ± SD	-18.97 ± 3.30
TAPSE, mm, median (IQR)	22.0 (20.0-24.0)
PASP, mmHg, mean ± SD	23.15 ± 7.63

SLE, systemic lupus erythematosus; T2DM, type 2 diabetes mellitus; anti-dsDNA, anti-double stranded DNA antibodies; LV, left ventricular; E/e', the ratio between early mitral inflow velocity and mitral annular early diastolic velocity; LAVI, left atrial volume index; left ventricular ejection fraction; GLS, global longitudinal strain; TAPSE, tricuspid annular plane systolic excursion; PASP, pulmonary arterial systolic pressure.