

diagnosis by the attending rheumatologist as the reference standard of SLE.

Results There were 85 patients with DLE (7 with overlapping LEP), 3 with LEP, and 2 with LET. Overall, 56 patients had a diagnosis of primary CCLE and 34 CCLE with SLE. Sensitivity was 88.2% and 97.1% for ACR and SLICC, respectively; specificity was 87.5% and 80.4% for ACR and SLICC, respectively. Among 7 ACR criteria false positive cases, all had DLE and (+) ANA, 6 had photosensitivity, 4 had leukopenia, and 1 had (+) anti-Sm and (+) aPL autoantibodies. Among 11 SLICC false positives, all had DLE, 10 had (+) ANA, 7 had photosensitivity, 6 had leukopenia and 1 had anti-dsDNA, anti-Sm and anti-aPL autoantibodies. Receiving operating curves (ROC) are shown in Figure 1.

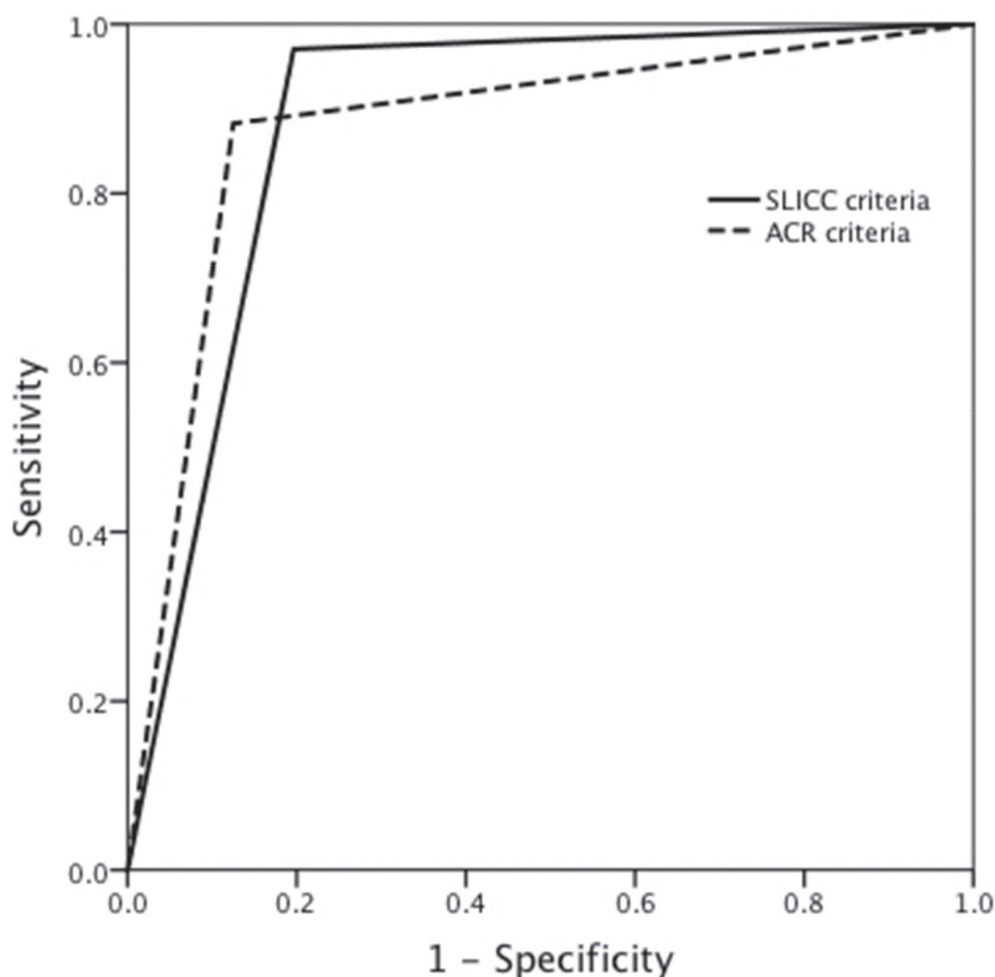
Conclusions Among individuals with a diagnosis of CCLE, SLICC and ACR criteria have excellent (97.1%) and very good (88.2%) sensitivity to classify SLE, respectively. Specificity, however, was superior for the ACR criteria. Our data indicate that nearly 20% and 13% of patients with primary CCLE would be misclassified as SLE if SLICC and ACR criteria were applied, respectively. Positive ANA, photosensitivity, leukopenia, and CCLE diagnosis are predominant manifestations in false positive cases. These findings are helpful to determine potential biases associated with the definition of CCLE in clinical and epidemiological studies.

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CE-10

CARDIOVASCULAR EVENTS PRIOR TO OR EARLY AFTER DIAGNOSIS OF SYSTEMIC LUPUS ERYTHEMATOSUS IN THE SYSTEMIC LUPUS INTERNATIONAL COLLABORATING CLINICS COHORT

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Abstract CE-09 Figure 1 ROC curves for the classification of SLE by the SLICC and ACR criteria in patient with CCLE

Abstracts

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Background The objective of this study was to describe the frequency of myocardial infarction (MI) prior to the diagnosis of SLE and within the first 2 years of follow-up.

Materials and methods The SLICC atherosclerosis inception cohort enters patients within 15 months of SLE diagnosis. MIs were reported and attributed on a specialised vascular event form. MIs were confirmed by one or more of the following: abnormal EKG, typical or atypical symptoms with EKG abnormalities and elevated enzymes (≥ 2 times ULN), or abnormal stress test, echocardiogram, nuclear scan or angiogram. Descriptive statistics were used.

Results 31 of 1848 patients that entered the cohort had an MI. Of those, 23 patients had an MI prior to SLE diagnosis or within the first 2 years of disease. Of the 23 patients studied 60.9% were female, 78.3% were Caucasian, 8.7% Black, 8.7% Hispanic and 4.3% other. The mean age at SLE diagnosis was 52.5 ± 15.0 years. Of the 23 MIs that occurred, 16 MIs occurred at a mean of 6.1 ± 7.0 years prior to diagnosis and 7 occurred within the first 2 years of follow-up. Risk factors associated with early MI in univariate analysis are male sex, Caucasian, older age at diagnosis, hypertension, hypercholesterolemia, family history of MI and smoking. In multivariate analysis only age (OR = 1.06 95% CI: (1.03, 1.09)), hypertension (OR = 5.01, 95% CI: (1.38, 18.23)), hypercholesterolemia (OR = 4.43, 95% CI: (1.51, 12.99)) and smoking (OR = 7.50, 95% CI: (2.38, 23.57)) remained significant risk factors.

Conclusions In some lupus patients MI may develop even before the diagnosis of SLE or shortly thereafter, suggesting that there may be a link between autoimmune inflammation and atherosclerosis.

Acknowledgements This abstract is being submitted on behalf of the Systemic Lupus International Collaborating Clinics (SLICC) group.

CE-11 EPIDEMIOLOGIC EVIDENCE FOR THE EFFECT OF POVERTY ON SLE DAMAGE: A LONGITUDINAL STUDY

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Background The relationship between poverty and SLE damage has been observed in several cross-sectional studies, but it remains unclear whether the loss of work due to SLE caused poverty or the reverse. Use of longitudinal data reduces the risk of reverse causation. The aim of the present study was to examine the effects of poverty at one point on subsequent damage, to assess whether the “dose” of poverty affects the extent of damage, and to evaluate the impact on damage of permanently exiting poverty.

Materials and methods Data are from the Lupus Outcomes Study (LOS). LOS participants were recruited from diverse sources in 2003 and followed through 2015 through annual structured surveys. In each year we characterised the respondents' poverty status based on household income and family size. Beginning in 2007, the survey included a validated measure of disease damage, the Brief Index of Lupus Damage. We used ordinary least squares regression to estimate the impact of 1) poverty in 2009, 2) the “dose” of poverty defined as the percentage of years in poverty between 2003 and 2009, and 3) the effect of permanently leaving poverty by 2009 on change in damage between 2009 and 2015, with and without adjustment for potential confounding variables (demographics, education, SLE duration, characteristics of health care, and health behaviours). To account for attrition and missing variables, multiple imputation was used.

Results In 2009, there were 783 respondents to the LOS annual survey, of whom 94% were female, 35% non-white, and 15% were in poverty. They were 49.8 (SD12.3) years of age and had had SLE for 16.9 (SD8.3) years. BILD damage scores averaged 1.9 (SD2.0, range 0–12). Table 1 shows the effect of poverty in 2007, “dose of poverty” between 2009 and 2015, and exiting poverty on change in damage, with and without adjustment. Those in poverty had greater increases in damage as did those continuously poor vs. poor some years vs. never poor. Exiting poverty was associated with change in damage scores closer to that among those who were never poor with the passage of as little as a year and smaller than those who remained poor. In all

Abstract CE-11 Table 1 Effect of poverty, percent of years in poverty, and exiting poverty on change in BILD damage scores, 2009–2015

	Poverty status		Percent of years in poverty			
	Poor	Not Poor	All Years	$\geq 50\%$ of Yrs.	$< 50\%$ of Yrs.	Never Poor
Unadjusted	2.02	1.33	2.52	159	1.54	1.32
Adjusted	1.97	1.34	2.45	1.45	1.49	1.34
Exited poverty permanently						
	Stayed Poor	1 Yr. Ago	2-3 Yrs. Ago	5-11 Yrs. Ago	Total	Never Poor
Unadjusted	2.08	1.47	1.43	1.17	1.40	1.33
Adjusted	1.98	1.24	1.44	1.08	1.30	1.36

Cells are change in damage scores.

Adjusted models include demographics, duration, health care characteristics and health behaviours. Change in damage scores differs significantly by poverty status, percent of years in poverty, and exiting poverty, with and without adjustment ($p < .05$).



CE-10 Cardiovascular events prior to or early after diagnosis of systemic lupus erythematosus in the systemic lupus international collaborating clinics cohort

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