

analyses, adjustment had minimal effect on results, indicating that the effect of confounding variables was minimal.

**Conclusions** The present study improves the certainty that poverty is etiologically related to damage and not an artefact of study design.

**Acknowledgements** Robert Wood Johnson Investigator in Health Policy Award, NIAMS P60 AR-053308

CE-12

# COMPARISON OF CLASSIFICATION CRITERIA, SELF-ASSESSMENTS AND IMMUNOLOGIC PROFILES IN PATIENTS WITH INCOMPLETE AND SYSTEMIC LUPUS ERYTHEMATOSUS

<sup>1</sup>Nancy J Olsen\*, <sup>1</sup>Carl McAloose, <sup>1</sup>Jamie Carter, <sup>2</sup>Bobby Kwanghoon Han, <sup>3</sup>Indu Raman, <sup>3</sup>Quan-Zhen Li, <sup>4</sup>Duanping Liao. <sup>1</sup>Division of Rheumatology, Department of Medicine, Penn State MS Hershey Medical Centre, Hershey PA 17033; <sup>2</sup>Division of Rheumatology, Department of Medicine, Cooper Medical School of Rowan University, Voorhees NJ; <sup>3</sup>Department of Immunology, University of Texas Southwestern Medical Centre, Dallas TX USA; <sup>4</sup>Department of Public Health Sciences, Penn State University, College of Medicine, Hershey PA 17033

10.1136/lupus-2016-000179.91

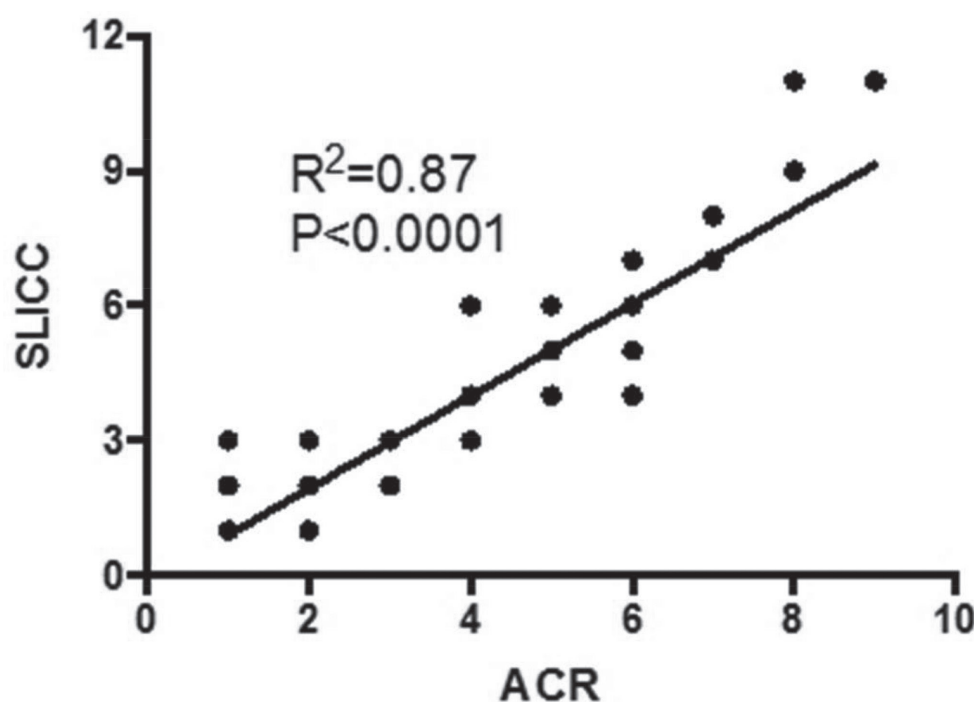
**Background** The syndrome of incomplete lupus erythematosus (ILE) likely includes individuals at risk for development of systemic lupus erythematosus (SLE). Studies of interventions to lower risk or prevent further disease in ILE are of interest. Design of such trials will require methods to classify patients and to assess risk. The goals of the present study were to evaluate performance of updated SLE classification criteria to define ILE and to probe for other features in these patients that might be useful as indicators of disease status. A long term goal is to develop prognostic multifaceted risk profiles that would have clinical applications.

**Materials and methods** Patients with ILE (N = 70) and SLE (N = 32) defined by the 1997 American College of Rheumatology (ACR) criteria were then reclassified using the 2012 Systemic Lupus International Collaborating Clinics (SLICC) criteria. Disease activity, patient self-assessments and levels of autoantibodies, soluble mediators and expressed Type I interferon (IFN) genes also were measured in the ILE and SLE patients and compared to healthy control (HC) individuals.

**Results** The two sets of classification criteria were highly correlated (Figure 1;  $R^2 = 0.87$ ). ILE patients were older ( $P = 0.0043$ ), with lower SLEDAI scores ( $P = 0.023$ ) and greater dissatisfaction with their health status ( $P = 0.034$ ) than SLE patients. Anti-C1q and sCD27 levels were correlated with ACR criteria and SLE Disease Activity Index (SLEDAI) scores ( $P \leq 0.0004$ ). Three cytokines, IL-7, IL12p70 and IL-13, were lower in both ILE and SLE than in HCs. Two IFN-related cytokines IP = 10 and MCP-1, were higher in SLE than in ILE. Of three IFN genes measured, IFI27 showed the greatest difference between ILE and SLE.

**Conclusions** The 2012 SLICC SLE classification criteria likely can be used to define ILE in future research trials. Patients with ILE are somewhat dissatisfied with their condition, possibly related to anxiety about the lack of a clear diagnosis. Further patient-reported outcome studies in this population would be of interest. Reliable assessment of lupus risk will likely include demographic, clinical and immunologic features. Some of the latter may suggest novel approaches to early treatment.

**Acknowledgements** This project was funded, in part, with a grant from the Pennsylvania Department of Health using Tobacco CURE Funds. The Department specifically disclaims responsibility for any analyses, interpretations or conclusions. It was also supported in part by the National Institutes of Health, NIAMS U34 AR067392. The data entry assistance of Fan He is appreciated.



**Abstract CE-12 Figure 1** Correlation between two SLE classification criteria, the 1997 ACR and 2012 SLICC sets, in 102 patients with either ILE or SLE. Values on each axis correspond to numbers of criteria in each of the sets. Significance determined using Pearson's R.