Results Ninety-three SLE patients were recruited (88% female) with median age of 33.6 ± 12.4 years and median disease duration of 11.5 ± 14.8 years. Mestizo (75%) and Afro-Latin American (22%) were majority. One quarter of patients had an early SLE (< 2 years of duration) and 64 were admitted at the time of urine collection. Hematologic disease (89%), arthritis (83%), cutaneous involvement (82%), and renal disease (66%) were among most common manifestations. 63% of patients were positive for anti-C1q. We found significant positive correlation between uNGAL levels and SLEDAI (r = 0.331, p = 0.02) and between uMCP1 with SLEDAI (r = 0.428, p < 0.02) and with uNGAL (r = 0.467, p < 0.0001). uNGAL and uMCP-1 were significantly higher in patients with LN than in patients without LN (53.0 ± 56.3 vs 16.0 ± 16.6 pg/ml, p = 0.001 and 2340.4 ± 4521.4 vs 472.4 ± 596.5, p = 0.015, respectively). uNGAL levels were also significantly higher in patients with active LN (>500 mg proteinuria/24 hrs) than in inactive LN (66.1 ± 61.9 vs 9.0 ± 8.6, p < 0.001). A ROC curve constructed for uNGAL, uMCP-1, and anti-C1q for LN in all SLE patients showed a good level of sensitivity and specificity (Figure 1).

Conclusions Colombian LN patients had 4 times and 5 times higher levels of uNGAL and uMCP-1, respectively than patients without LN. Additionally, uNGAL was significantly higher in patients with active LN. Both markers were correlated with disease activity. A multinational prospective study is ongoing under GLADEL cohort, in order to evaluate those biomarkers in 14 Latin American countries.

Acknowledgements JA Gómez-Puerta was supported by Colciencias (conv. 656 de 2014). Anti-C1q antibodies were provided by Inova, Werfen, Colombia

CE-07 SENSITIVITY OF LUPUS CLASSIFICATION CRITERIA FOR SPECIALIST-DIAGNOSED SYSTEMIC LUPUS ERYTHEMATOSUS IN A POPULATION-BASED REGISTRY OF AMERICAN INDIAN/ALASKA NATIVE PEOPLE

1Elizabeth D Ferucci*, 5Sam Lim, 3Caroline Gordon, 4Charles Helmick, 1Alaska Native Tribal Health Consortium, Anchorage, Alaska, USA; 2Emory University, Atlanta, Georgia, USA; 3University of Birmingham, Birmingham, UK; 4Centers for Disease Control and Prevention, Atlanta, Georgia, USA

Background The Indian Health Service Lupus Registry previously reported a high prevalence of systemic lupus erythematosus (SLE) among American Indian/Alaska Native populations. SLE was defined based on having documentation in the medical record of the American College of Rheumatology (ACR) classification criteria. The SLICC criteria have recently been developed for SLE. The Boston weighted criteria were previously developed for epidemiologic studies. The primary aim of this analysis is to compare the sensitivity of the ACR, SLICC, and Boston weighted criteria for specialist-diagnosed SLE in this population-based registry.

Materials and methods We included all individuals in the IHS Lupus Registry with a documented specialist diagnosis of SLE in
the medical record as of 2007. For this analysis, specialist diagnosis of SLE was considered the gold-standard. Data elements for the criteria sets were abstracted from existing medical records, including all elements for the ACR criteria and most elements for the SLICC criteria (which were in development at the time of data abstraction), and most elements of the Boston-weighted criteria (excluding persistently negative ANA). Sensitivity of each set of criteria was calculated and comparisons of the sensitivity of the SLICC and ACR criteria were performed using McNemar’s test.

Results There were 245 patients with a specialist diagnosis of SLE in the registry in 2007. The Boston weighted criteria had the highest sensitivity, followed by SLICC then ACR criteria (87.8%, 81.6%, and 78.0%, respectively). The sensitivity of the SLICC criteria were higher than ACR criteria (p = 0.0201). The majority of patients with a specialist diagnosis of SLE (74.3%) met all 3 criteria sets. Of the 54 patients (22%) who did not meet ACR criteria, 12 met SLICC criteria (with or without Boston), 23 met the Boston-weighted criteria only, and 19 did not meet any criteria set. Of those who met SLICC but not ACR criteria, the most common SLICC criteria met that are not included in ACR criteria were low complements (58%), alopecia (33%), and biopsy-proven nephritis (33%). Of those with no criteria met in the medical record, the most common element present from any of the criteria sets was positive ANA (57.9%).

Conclusions The SLICC and Boston-weighted criteria are more sensitive for specialist-diagnosed SLE than the ACR criteria in this population-based registry, though the majority of patients meet all sets of criteria.