SLEDAI-2K for 1 year as gold standard. After categorizing moderate to severe ≥ 3 of SLEDAI-2K, sensitivity, specificity, positive predictive values (PPV), and negative predictive values for the algorithms to detect patients with moderate to severe SLE were estimated.

**Results** We included 151 patients with SLE. Their mean age was 34.5 ± 8.8, and 94.7% were female, presenting initial SLEDAI-2K score of 3.8 ± 3.2. For classifying moderate to severe SLE, the PPV of claims-based algorithm ranged from 75.86 to 77.19%. The algorithms modifying glucocorticoid dose to differentiate between moderate and severe SLE or considering any prescriptions of intravenous glucocorticoid did not increase the PPV.

**Conclusions** The algorithm using diagnostic codes for comorbidities and medications demonstrated PPV of 77.19% to detect moderate to severe SLE. It may be a useful for classifying SLE severity in Korean claims database studies.

**REFERENCES**