The relationships between continuous covariates (cumulative PNL, number of escalations, number of de-escalations, time to first escalation, number of mild-to-moderate flares, number of severe flares and change in damage index) and cluster were examined using analysis of variance (ANOVA) and Tukeys HSD.

Results A total of 210 HDAS periods (104 patients) were identified. Of the HDAS periods, patients were classified as treatment naïve (10%), HCQ inadequate response (20%), IS inadequate response (68%), and combination IS inadequate response (2%). The most commonly used IS was mycophenolate (23% of all HDAS periods). The trajectories were categorized into 3 final clusters: Cluster A (42/210) had more escalations than Cluster B (132/210) and Cluster C (36/210), see figure 1. There was no difference between clusters in the duration of time spent in HDAS, but a trend for higher cumulative PNL in Cluster A and they had significantly more and earlier escalations than Cluster B and C. Damage accrual appeared to be highest in Cluster C (the de-escalators) although not statistically significant. There was no difference between the distribution of the baseline treatment groups in each cluster.

Conclusions Treatment trajectories can be described using clustering that examines treatment escalations and de-escalations. This pilot study showed that treatment trajectories appear to have an effect on clinical outcomes. Further studies are planned to explore the relationship of patient characteristics or physician treatment decisions have on these clusters.

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remission one patient in the black group had flare (14.2%) five in the intravenous administration had severe flares (8.1%) and were discontinued. During the evaluation ten had flares that were adjusted with steroids (eight articular or skin reactivation) and two with renal disease. On the five severe flares two required hospitalization. The mean time duration to achieve LLDAS was six months. Twenty-seven achieved steroid free state and remained two patients on 2.5 mg and seventeen stable on daily 5.0 mg of prednisone.

**Conclusions** Using the LLDAS criteria response, it was possible to show that the majority of patients with active SLE on all three groups studied intravenous, subcutaneous and black race receiving belimumab for prolonged periods go into remission steroid free or in low disease activity in association with the correspondent immunosuppressive treatment.

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**Clinical Characteristics and Remission of Patients with Systemic Lupus Erythematosus in China: Results from SLE Treatment and Research Group (CSTAR) Registry With a Real-time Collecting System**

1Ziqian Wang*, 2Mengtao Li, 3Juliang Zhao, 2Qian Wang, 2Xiaofeng Zeng, Peking Union Medical College Hospital; 2Department of Rheumatology, Peking Union Medical College Hospital, Peking Union Medical College and Chinese Academy of Medical Science, Key Laboratory of Rheumatology and Clinical Immunology, Ministry of Education, Beijing, China

**Background** To develop a new system to study the real-world clinical characteristics and remission of systemic lupus erythematosus based on the first and largest registry cohort in China.

**Methods** Based on previous experience of CSTAR registry from 2009, a new online platform through mobile application program (APP) was designed to continuously collect real-time data during clinical practice with predesigned case report form. Baseline and follow-up data were directly collected by physician at clinic, uploaded via our APP and integrated into database for analysis immediately, including demography, clinical manifestations, disease activity (SLEDAI-2K), organ damage (SLICC Damage Index), lab results, imaging and medications. Biological samples were preserved for future study. Along with data collection, data cleaning and validation were managed by a professional backstage statistician to ensure quality.

**Results** A total of 13,699 SLE patients from 236 different centers were registered up to December 2018. The male to female rate was 1:12 (1076/12,623). The average age at onset, at diagnosis and at enrollment were 30.7 y, 31.7 y and 35.5 y respectively. The top three involved organ systems at entry were lupus nephritis (36%), hematologic involvement (35.8%) and neuropsychiatric disorder (5.7%). In addition, 637 patients (4.6%) were found to be diagnosed in the intravenous administration had severe flares (8.1%) and were discontinued. During the evaluation ten had flares that were adjusted with steroids (eight articular or skin reactivation) and two with renal disease. On the five severe flares two required hospitalization. The mean time duration to achieve LLDAS was six months. Twenty-seven achieved steroid free state and remained two patients on 2.5 mg and seventeen stable on daily 5.0 mg of prednisone.

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