

## Short oral presentation session 5: lupus nephritis

### LSO-025 COMPARISON BETWEEN ADD-ON PULSE METHYLPREDNISOLONE VERSUS MEDIUM TO HIGH DOSE GLUCOCORTICOID ALONE IN THAI PATIENTS WITH PROLIFERATIVE LUPUS NEPHRITIS RECEIVING MONTHLY PULSE INTRAVENOUS CYCLOPHOSPHAMIDE

Thananant Trongkamolthum, Boonjing Siripaitoon, Pornpip Intapiboon\*. *Allergy and Rheumatology Unit, Department of Internal medicine, Faculty of Medicine, Prince of Songkla university, Thailand*

10.1136/lupus-2023-KCR.66

**Background** Add-on intravenous pulse methylprednisolone (IVMP) is a strategy to reduce cumulative glucocorticoids (GCs) doses for treating proliferative lupus nephritis (LN). However, the benefit is still under debate. This study compares the efficacy and safety of add-on IVMP versus GCs alone in Thai patients with proliferative LN receiving monthly intravenous cyclophosphamide (IVCY).

**Methods** This study enrolled 63 biopsy-proven proliferative LN who underwent induction therapy in Songklanagarind hospital, from January 2009 to December 2019. 18 patients in add-on IVMP and 45 patients in medium to high dose GCs alone were reviewed and analysed. Both groups received monthly IVCY for the induction phase. The primary outcome was the remission rate, and the secondary outcomes were a 6-month proteinuria decline from baseline > 50%, renal survival, time to achieve remission, cumulative GCs dose, and proteinuria < 0.5 gm.

**Results** The remission rate in our study was 79.4%, which was no significant difference between add-on IVMP and GCs alone (66.7% vs. 84.5%,  $p = 0.214$ ). The secondary outcomes were not different between groups demonstrated as renal survival (83.3% vs. 97.8%,  $p = 0.067$ ), median time (IQR) to achieve remission [180 (120,215) vs. 138 (103,237.2),  $p = 0.962$ ], proteinuria decline from baseline > 50% (66.7% vs. 86.7%,  $p = 0.085$ ), proteinuria < 0.5 gm (27.8% vs. 40.0%,  $p = 0.535$ ), and cumulative GCs dose. However, the 6-month renal function was significantly improved in add-on IVMP (72.2% vs. 57.8%,  $p = 0.002$ ). We compared the subgroups of 11 add-on IVMP with medium GCs and 45 GCs alone; the overall outcomes were similar, but the mean (SD) 6-month cumulative GCs dose tended to lower in add-on IVMP [3.7 (1.2) vs. 4(1), gm,  $p = 0.052$ ].

**Conclusions** The remission rate was not different between add-on IVMP and GCs alone but significant improvement of renal function in add-on IVMP in proliferative lupus nephritis who monthly IVCY.

### LSO-026 SIROLIMUS VERSUS MYCOPHENOLATE MOFETIL FOR THE TREATMENT OF LUPUS NEPHRITIS: RESULTS FROM A REAL-WORLD CSTAR COHORT STUDY

Wei Bai\*, Mengtao Li. *Rheumatology, Peking Union Medical College Hospital, China*

10.1136/lupus-2023-KCR.67

**Background** The effectiveness and safety of sirolimus for the treatment of systemic lupus erythematosus (SLE) and lupus nephritis (LN) have been shown in some studies. However, a

comparison of sirolimus with standard of care (SoC) for LN patients has not been reported. We conducted the study to compare the efficiency and safety of sirolimus versus mycophenolate mofetil (MMF) for LN treatment.

**Methods** A real-world cohort study based on the Chinese SLE Treatment and Research (CSTAR) registry was conducted. LN patients who were prescribed sirolimus or MMF were enrolled. Patients who achieved LLDAS (lupus low disease activity state) or remission at baseline were excluded. Propensity score matching was used to ensure equivalent disease conditions and background medications. SLE disease activity indices, serological parameters, steroid doses, renal efficacy, and adverse events were compared between the two groups at 3-month, 6-month, and 12-month follow-up visits.

**Results** Data from 53 patients in each group were analyzed. The clinical effectiveness of sirolimus, including the proportion of patients with LLDAS/remission, or clinical response (SLEDAI-2K reduction  $\geq 4$  and PhGA increase < 0.3), the change of Systemic Lupus Erythematosus Disease Activity Index 2000 (SLEDAI-2K) scores, physician's global assessment (PhGA) scores, the remission of lupus nephritis, the change of 24 hours urine protein level, and the steroid tapering effect, were equivalent to those of MMF at all follow-up timepoints (all  $P \geq 0.05$ ). Greater improvements in complement levels were observed in the sirolimus group than the MMF group at 3, 6, and 12 months. Ten adverse events in the sirolimus group and one in the MMF group were recorded. None was severe or led to drug discontinuation.

**Conclusions** Sirolimus was as effective as MMF in the treatment of LN and glucocorticoid tapering. Sirolimus had better effects on serological improvement. Sirolimus was well tolerated in LN patients.

### LSO-027 PREDICTORS OF LONG-TERM RENAL SURVIVAL AND MORTALITY IN PATIENTS WITH BIOPSY-PROVEN LUPUS NEPHRITIS: A PROSPECTIVE COHORT STUDY

<sup>1,2</sup>Jung-Min Shin\*, <sup>2,3</sup>So-Young Bang, <sup>2</sup>Jiyoung Lee, <sup>2,3</sup>Hye-Soon Lee, <sup>2,3</sup>Sang-Cheol Bae. <sup>1</sup>Department of Rheumatology, Kangdong Sacred Heart Hospital, Hallym University College of Medicine, Republic of Korea; <sup>2</sup>Department of Rheumatology, Hanyang University Institute for Rheumatology Research, Republic of Korea; <sup>3</sup>Department of Rheumatology, Hanyang University Hospital for Rheumatic Diseases, Republic of Korea

10.1136/lupus-2023-KCR.68

**Background** Lupus nephritis (LN) has been identified as a major risk factor for the mortality in patients with systemic lupus erythematosus (SLE). We investigated the predictors of end-stage renal disease (ESRD) and death among LN patients.

**Methods** This study enrolled Korean patients with biopsy-proven LN, from a prospective BAE lupus cohort between January 1998 and December 2018. Baseline demographics, histological, and clinical features were collected, and the disease activity measured by the SLE Disease Activity Index 2000 (SLEDAI-2K) and organ damage determined by the Systemic Lupus International Collaborating Clinics Damage Index (SDI) score were annually assessed.

**Results** In total, 599 patients with proliferative LN (class III and IV/±V) and membranous LN (class V) were included and followed for a mean of  $10.7 \pm 6.7$  years. 42 (7.0%) LN patients developed ESRD. In a multivariate logistic regression model, anti-phospholipid (aPL) antibodies [odds ratio (OR)