Background and aims Mizoribine is an inhibitor of inosine monophosphate dehydrogenase, which is widely used for patients with lupus nephritis and also patients after renal transplants. Its anti-cytomegaloviral effect is unique as an immunosuppressant. We examined the efficacy and safety of early sequential combination of mizoribine and tacrolimus in lupus nephritis.

Methods Retrospective review of medical record was performed for all the 63 patients who received the combination therapy of mizoribine and tacrolimus and corticosteroids for induction or maintenance of lupus nephritis at St. Luke’s International Hospital, Tokyo, Japan. For efficacy analysis, we extracted a series of change in serum creatinine, serum complement level, urine protein creatinine ratio, dose of corticosteroid. We further reviewed safety profile such as adverse events occurred during the use of multi-target therapy, drug survival rate, or reasons for discontinue multi-target therapy in all patients. Complete remission of lupus nephritis was defined as a value of proteinuria <0.5 g/gCr, normal urinary sediment, serum albumin 3.5 g/dl and a normal value of serum creatinine.

Results Fifty six out of the sixty three patients (female: male=59:4, average age 37.4 ±11 years old) achieved complete remission in 6 months and there were only two relapses and both of them had Class V nephritis. At four month, the average urine protein creatinine ratio was 0.36 g/gCr, and the average dose of prednisolone was 9.9 mg/day. There were only three episodes of infections which required antibiotics administration.

Conclusions Early sequential combination of mizoribine and tacrolimus seems to be effective and safe for lupus nephritis.

Background and aims Interferon (IFN)-γ levels were higher in patients (mean=±SD=2.95±10.28 pg/ml, median=0), (p=0.0080). Serum IL6 levels were also higher in patients (mean=±SD=69.33±11.7 pg/ml), (p<0.0001). Serum TNFα were also elevated in patients (mean=±SD=247.3±206.49 pg/ml, median 384.5) than controls (mean=±SD=236.05±23.53 pg/ml, median 238), (p<0.0001). Interferon γ levels were significantly higher in females, lower in patients with lymphopenopathy and significantly higher in lupus nephritis class III, positively correlated with thrombocytopenia and negatively correlated with ESR, dsDNA, C3, C4. IL6 and TNFα were significantly associated with oral ulcer and alopecia respectively. Both showed a