**Background and aims** Ozanimod (RPC1063) is a specific and potent small molecule modulator of S1P1,5R that has shown therapeutic benefit in clinical trials of relapsing multiple sclerosis and ulcerative colitis. Its metabolite, RP-101075, shares ozanimod’s specificity profile at the S1P receptor family in vitro, and its pharmacokinetic (PK) and pharmacodynamic profile in vivo.

**Methods** The (NZB×NZW)F1 model was used in therapeutic dosing mode to assess the benefit of an S1P1,5R modulator in systemic lupus erythematosus (SLE), compared to cyclophosphamide.

**Results** As predicted for an S1P1,5R modulator, treatment with 0.3, 1 and 3 mg/kg RP-101075 resulted in a dose-dependent reduction in circulating T and B cells, achieving 62%–99% decrease across all doses tested. Compared to vehicle treated animals, 3 mg/kg RP-101075 reduced proteinuria over the duration of the study (34±5 vs 18±1 U*week; p<0.0001), and blood urea nitrogen (36±5 vs 21±3 mg/dL; p<0.0001). Additionally, RP-101075 reduced kidney disease in a dose dependent manner, as quantified by histological assessment of mesangial expansion, endo- and exo-capillary proliferation, interstitial infiltrates and fibrosis, glomerular deposits and tubular atrophy. In addition, RP-101075 significantly reduced expression of fibrotic and immune genes in the kidneys, with minimal effect on IFN-inducible genes. Of particular note, RP-101075 lowered the number of plasmacytoid dendritic cells, a major source of IFNα in lupus patients, and all B and T cell subsets in the spleen.

**Conclusions** Given that RP-101075 shares the pharmacokinetic profile of ozanimod and reduces circulating lymphocytes similarly, ozanimod warrants clinical evaluation as a potential treatment for SLE.

**IS SPLENECTOMY A SAFE AND EFFECTIVE THERAPEUTIC OPTION IN SYSTEMIC LUPUS ERYTHEMATOSUS? A SINGLE-CENTRE STUDY**

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**Background and aims** Thrombocytopenia is a relatively common feature in systemic lupus erythematosus (SLE) patients, although severe thrombocytopenia is rare. Splenectomy is considered an acceptable treatment option for refractory thrombocytopenia in different haematological conditions. However, its role in SLE has been controversial, due to potential surgical complications and to its possible association with SLE flares. The aim of this study was to determine safety and efficacy of splenectomy in a cohort of SLE patients.

**Methods** We included all patients with SLE who fulfilled ≥4 ACR criteria, and underwent splenectomy between 2000 and 2015 in a tertiary care centre in Mexico City. Patients with other rheumatic diseases (except for anti-phospholipid syndrome) were excluded. We recorded demographic, clinical and serological characteristics at the time of surgery and during follow-up.

**Results** Thirty-six patients were included, 91.7% were women and mean age was 33.1±12.95. Refractory thrombocytopenia was the surgical indication in 28 patients (77.7%). Laparoscopic splenectomy was performed in 80.6% of cases. Two patients had surgical complications (intra-abdominal sepsis and pancreatic fistula). There were no deaths directly associated with the procedure. Among patients with thrombocytopenia, 85.7% achieved complete remission, in a mean period of 1.65±3.13 months. Cumulative prednisone dose in the year after the surgery was lower than the year before (8.7±5.8 vs 4.2±3.2 grams, p<0.01). Mean SLEDAI score at baseline was 3.53±2.9, and it decreased at 3 and 6 months (1.15±2.07 and 1.21±2.38, p<0.01, respectively) during follow-up.

**Conclusions** Splenectomy is a safe procedure in SLE patients, and it represents an effective therapeutic option for refractory thrombocytopenia.

**ETHANOL PREVENTS DAMAGE OF SKIN, KIDNEY AND JOINT IN LUPUS-PRONE MICE BY REGULATING LIPID RAFTS**

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**Background and aims** Ethanol has been elaborated to have a beneficial effect on destructive arthritis. Nevertheless, the
effect of ethanol on the development of systemic lupus erythematosus (SLE) remains controversial. This study was performed to determine the potential role of moderate ethanol consumption in SLE pathological progression and clarify its functional mechanism.

Methods We used MRI/Jpr mice to assess whether ethanol drinking has any impact on the development of SLE and investigated whether ethanol regulates pathologic progression of SLE through inhibiting lipid rafts.

Results We found that 10% ethanol in vivo delayed disease progression and organ damage and prolonged survival. In vitro ethanol treatment not only inhibited the aggregation, proliferation, adhesion molecule expression and IFN-γ secretion of T cells, but also decreased lipid raft clustering on T cells. In addition, ethanol inhibited SLE serum-induced skin inflammation and monocyte differentiation into dendritic cells (DCs). Furthermore, ethanol treatment of monocytes that were in the process of differentiating into DCs decreased lipid raft clustering.

Conclusions These data strongly support the viewpoint that ethanol delays the disease progression of SLE by inhibiting lipid raft clustering and suggest that moderate drinking of ethanol may have a protective value for patients with SLE.

84 PROSPECTIVE SINGLE CENTRE STUDY OF EFFECTIVENESS OF UPFRONT RITUXIMAB AND MYCOPHENOLATE WITH MINIMUM STEROID IN SLE

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Background and aims Treatment options for SLE have significant morbidity and mortality. Side effects from corticosteroid usage limit patient adherence and treatment efficacy. B cell depletion appears to target a critical pathophysiological pathway in SLE. Trials with rituximab has shown mixed results.

We aim to analyse our experience of using rituximab and mycophenolate upfront on presentation with minimum oral steroids.

Methods 12 patients with SLE, seen between Jan 2015 to March 2016, were included in the study. All patients completed 6 months of follow-up. Patients were treated with 2 doses of rituximab (1 g) and methyl prednisolone (500 mg) on days 1 and 15, and maintenance treatment of mycophenolate mofetil (2000mg) and low dose prednisolone (<7.5mg) which was tapered off.

Results 10 were females and 2 males. Mean age of the patients is 24.5. 9 had lupus nephritis, 1 mesenteric vasculitis, 1 CNS vasculitis and 1 severe cutaneous vasculitis with pancytopenia. Average SLEDAI improved from 14 to 4. 6/9 LN attained complete renal remission and 2 partial remission. One patient died due to infection and renal disease 15 days after infusion. 2 vasculitis and one NPSLE patient improved completely. Two patients had infection requiring hospitalisation with in 8 weeks of infusion and one patient had severe bradycardia during the infusion and received only 1000 mg rituximab. Steroid was stopped by 6 months in 6 patients and in the dose was below 5 mg in rest.

Conclusions Early Rituximab and mycophenolate is an effective option for treating severe lupus and has steroid sparing property.