and renal death had already occurred during the intervention within 3 months during induction therapy. Therefore, we observed Tacmonia as a common cause of death in all groups. In group 1 and 2, there was a tendency for recovery of renal function 1 year after the induction of remission, indeed, the dialysis withdrawal rates were 88%. The remission rates at 6/12 months were 85/77, 73/55, 92/67, 58/58%. The achievement rates of daily PSL dose of 10mg at 6 months/5mg at 12 months were 64/65, 76/74, 64/65, 25/25. The remission rates at 6/12 months were 85/77, 73/55, 92/67, 58/58%. The achievement rates of daily PSL dose of 10mg at 6 months/5mg at 12 months were 64/65, 76/74, 64/65, 25/25.

Conclusions: These results showed that RTX is effective and has an acceptable safety profile in relatively elderly AAV-GN patients in daily practice.

FR-PO653 Interstitial ANCA-Associated Vasculitis Associates With Severe Kidney Injury Independent of Glomerulonephritis Deserie Tampe, Samy Hakroush, Bjorn Tampe. University Medical Center Göttingen, Göttingen, Germany.

Background: Antineutrophil cytoplasmatic antibody (ANCA)-associated vasculitis (AAV) is a small vessel vasculitis affecting multiple organ systems, including the kidney. Small vessels in the kidney include small-sized arteries (interlobar artery, afferent and efferent arteriole), capillaries (glomerular and peritubular capillary) and venules. Although crescentic ANCA glomerulonephritis (GN) is a common histological finding reflecting glomerular small vessel vasculitis, it is reasonable that manifestation of AAV could also contribute to interstitial small vessel vasculitis.

Methods: A total number of 49 kidney biopsies with confirmed renal involvement of AAV were retrospectively included, a renal pathologist evaluated all biopsies and was blinded to clinical data collection and analysis.

Results: Among all active and chronic tubulointerstitial lesions analogous to the Banff scoring system, the only association between severe kidney injury requiring kidney replacement therapy (KRT) was observed for interstitial vasculitis in AAV reflected by peritubular capillaritis (pts, p=0.0002) and arteritis (v, p=0.0069), affecting 5/49 (10.2%) and 11/49 (22.4%) of renal biopsies, respectively. Interestingly, no association between interstitial vasculitis (pts and v correlating with severe kidney injury) and any glomerular lesion in ANCA GN (also correlating with severe kidney injury) was observed, thereby confirming that interstitial vasculitides contributes to severe kidney injury independent of ANCA GN. By contrast, short-term renal recovery from KRT was equal in both groups, suggesting a distinct association with acute decline of kidney function at disease onset.

Conclusions: Taken together, by using the Banff scoring system we here expand our current knowledge of renal interstitial lesions in AAV revealing peritubular capillaritis and arteritis as important histological alterations associated with severe kidney injury in a considerable subset of AAV. Furthermore, our findings that interstitial vasculitides did not correlate with crescentic ANCA GN implicate that the characteristics of each vasculitis manifestation are independent and could further improve our understanding of mechanisms contributing to renal injury.

FR-PO654 Comparison of Outcomes Between Rituximab and Cyclophosphamide for Primary Membranous Nephropathy: A Single Center Experience Azm U. Hussain, Nadia Sarween. University Hospitals Birmingham NHS Foundation Trust, Birmingham, United Kingdom.

Background: Rituximab is increasingly being considered first-line treatment for Primary membranous nephropathy. While treatment outcomes have been compared to Calcineurin inhibitors there is no randomized controlled trial to date comparing Rituximab with a Cyclophosphamide-based regime. We aim to review the outcomes of both treatments at our centre.

Methods: All patients with a diagnosis of Primary Membranous Nephropathy made between 2011 and 2020 were included in the study and identified through histology records. The follow-up period was until December 2021. Data were extracted from hospital electronic patient records. Secondary Membranous nephropathy and disease occurring in renal transplant recipients were excluded. Any patient who received Rituximab or cyclophosphamide were included and their clinical outcomes were compared. Complete remission was defined as a reduction in proteinuria to less than 300mg/day to less than 300mg/day we the partial remission was defined as a reduction in proteinuria of at least 50% from baseline and to ≤ 300 mg/day and <3.5 g/day. Statistical analysis was performed using Pearson-Chi square and One way ANOVA tests.

Results: 50 patients were identified with a diagnosis of primary membranous nephropathy and received treatment with either or both Cyclophosphamide, and Rituximab. The mean age of participants was 53 years with 30% males, 72% (n=32) were PLA2R positive at the point of diagnosis. Response rates between the two treatment groups were not significantly different with 20% achieving full remission in Cyclophosphamide versus 17% in the Rituximab treated group (p = 0.40). There were significantly more partial remissions observed in the Cyclophosphamide versus Rituximab group (57% vs 24% respectively, p=0.003). Time to favourable response was shorter in the Cyclophosphamide versus Rituximab group (7 vs 12.6 months respectively, p = 0.003).

Conclusions: In our study, there is a suggestion that those treated with Cyclophosphamide versus Rituximab were more likely to respond to treatment. Patients treated with Rituximab also appear to take longer to respond. A trial comparing both treatments and reviewing short and long term responses is warranted.

FR-PO655 Outcomes of Idiopathic Membranous Nephropathy: A Single Centre Experience Christina Bell, Anna K. Forbes, Benjamin Low, Sumaya Huque, Alexander F. Gardner, David Makunjuola, Bhrigu Raj Sood. Epsom and Saint Helier University Hospitals NHS Trust, Carshalton, United Kingdom.

Background: The immunosuppressive approach to treat idiopathic membranous nephropathy is highly variable and outcomes are inconsistent in the published literature.

Methods: We conducted a retrospective review of outcomes in patients with high-risk idiopathic membranous nephropathy treated with immunosuppression at a tertiary renal centre in London.

Results: We identified 44 patients, comprising 33 males and 11 females. Mean age was 58.6 years (standard deviation 13.4 years) and 82.6% were Caucasian. PLA2R antibody status was assessed in 59.1% (26/44 patients); of these 69.2% were positive. At treatment initiation median urine PCR was 962 mg/mmol (IQR 702 – 1277 mg/mmol), median albumin 21g/L (IQR 16-28 g/L), median creatinine 136 µmol/L (IQR 98 – 180 µmol/L) and median of GFR 58.9 ml/min (IQR 26 - 60 ml/min). First line therapy comprised of either IV cyclophosphamide in combination with oral prednisolone (C+P) (70.5%) or Tacrolimus monotherapy (Tac) (29.5%). We found a higher response rate in the Tac group at all time points (6,12 and 24 months) but these findings were not statistically significant. At 6 months, of those who received C+P 11% (3/26 patients) achieved complete remission (CR) and 46.2% (12/26 patients) achieved partial remission (PR). With Tac 45.5% (5/11 patients) achieved CR and 36.4% (4/11 patients) achieved PR. Relapse rates within 24 months of treatment initiation were higher in patients who received C+P (23.1% compared with 12.9% in those treated with C+P). However this finding was not statistically significant. 7 patients progressed to ESKD and required renal replacement therapy, including 4 on C+P and 3 on Tac.

Conclusions: We have been unable to identify a difference in outcomes between C+P and Tacromus suppression treatment regimens. Published literature suggest Rituximab is superior in patients who are PLA2R antibody positive and we are in the process of analysing this in our population.

FR-PO656 Associations Between Biomarkers of Complement Activation, Galactose-Deficient IgA1 Antibody, and the Updated Oxford Pathology Classification of IgA Nephropathy Yunting Juan,1,2Yen-Ling Chiu.1,21Far Eastern Memorial Hospital, New Taipei City, Taiwan; 2Yuan Ze University, Chung-Li, Taiwan.

Background: Our prior study indicates a close relationship between alternative complement pathway activation, Galactose-Deficient IgA1 (Gd-IgA1) concentration, and clinical severity of IgA nephropathy (IgAN). Nonetheless, the relationship between complement factors and the updated Oxford classification of IgAN remains unclear.

Methods: This study enrolled eighty-four previously-untreated, biopsy-diagnosed IgAN patients from two medical centers in Taiwan. The clinical and laboratory findings were collected at the time of biopsy. Plasma levels of complement factor C3a, factor Ba and Gd-IgA1 were measured and analyzed.

Results: It was found that levels of proteinuria positively correlated with the updated Oxford classification of mesangial hypercellularity (M), endocapillary hypercellularity (E), tubular atrophy/intestinal fibrosis (T), and crescents (C). In addition, plasma Gd-IgA1 levels are significantly elevated in IgAN patients with tubular atrophy/intestinal fibrosis (T). Factor Ba, a biomarker of the alternative pathway, is also significantly elevated in IgAN patients with tubular atrophy/intestinal fibrosis (T). A similar change was detected for factor C3a but the difference did not reach statistical significance. Levels of factor Ba also negatively correlated with Gd-IgA1 and positively correlated with proteinuria.

Conclusions: The results indicate that both levels of Gd-IgA1 antibody and factor Ba reflect the Oxford classification on IgAN. Whether these biomarkers can be used to guide therapeutic decisions requires further study.

FR-PO657 Prevalence of Optimal Conservative Therapy Implementation Among CureGN Participants With IgA Nephropathy Arun Rajshekara,1, Maria Larkina,2 Bruce A. Julian,1, Laura H. Mariani,2 Dana Rizk,1,21The University of Alabama at Birmingham School of Medicine, Birmingham, AL; 2University of Michigan Michigan Medicine, Ann Arbor, MI.

Background: Immunoglobulin A nephropathy (IgAN) is the most common primary glomerulonephritis in many countries. 20-40% of patients progressed to kidney failure by 20 yr after diagnosis. Optimized supportive care is pivotal in addressing modifiable risk factors for progression, including hypertension and proteinuria. Through the Cure Glomerulopathy [CureGN] study, we sought to ascertain prevalence of optimal BP and proteinuria control, and maximum ACEi or ARB dosing at time of treatment with C+P. However, data on rates of optimal treatment remain limited.

Methods: CureGN, an observational longitudinal study, enrolled 458 adults ± 18 yr with primary IgAN within 5 yr of initial diagnostic kidney biopsy. BP measurement, and urine protein-to-creatinine ratio (UPCR) values were obtained within 60 d of C+P initiation. RAASI prescription was utilized at baseline and longitudinally. Enrollment visits were classified as incident [< 6 mo of biopsy] or prevalent [> 6 mo post biopsy]. Goals for BP and proteinuria control were the 2012 KDIGO guidelines at study initiation.

Key: TH - Thursday; FR - Friday; SA - Saturday; OR - Oral; PO - Poster; PUB - Publication Only
Underline represents presenting author.