## **SA-PO404**

## Response to Induction Therapy and Treatment Adverse Events in Incident ANCA-Associated Vasculitis (AAV) Patients

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**Background:** AAV is a severe systemic vasculitis with a variable clinical presentation and frequent renal involvement. Rapid induction of remission is desirable and therapy is typically a combination of high dose glucocorticoids (GC) with rituximab (RTX) or cyclophosphamide (CYC). Treatment-related adverse events (AEs) are common and contribute to long term organ damage as well as acute morbidity. This retrospective study aimed to document clinical outcomes and AEs in incident AAV patients managed in routine clinical practice.

**Methods:** 929 incident AAV patients from 4 European countries (399 physicians) were diagnosed between 2014-17 and data collected at baseline, 1, 3, 6 and 12 months following commencement of induction therapy was reviewed.

**Results:** 54% of patients had granulomatosis with polyangiitis, and 46% had microscopic polyangiitis; mean age was 56.82 years (SD 14.2) with 53.7% male. Birmingham vasculitis activity score (BVAS) was used in only 12% of cases. Physicians reported 12% patients as mild/localized, 54% as moderate systemic and 34% as severe life threatening AAV. Induction therapy varied with 59% receiving CYC, 24% RTX and 3% a combination of CYC+RTX+GC, whilst 83% received GCs. As BVAS was not used routinely, clinical response was assessed as full (no vasculitis activity and GC taper on track), partial (reduction in vasculitis activity), or no response (no improvement in vasculitis). Response rate varied and AEs were common. Full response at 1 month was associated with good 12-month outcomes (81% full response) whereas partial response at 1 month (56%) was associated with less favorable outcomes (58% full response at 12 months). 6% of incident patients relapsed within the first 12 months.

**Conclusions:** Response rate to remission induction therapy in AAV is still variable. Early response is associated with a better response rate at 12 months. Infections and treatment-related AEs are common, especially in the first 3 months. New targeted therapy options are needed to improve response rates and reduce burden of therapy.

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	1 month	3 months	fi months	12 months
Full Response W	18	43	61	59
At least one AE %	45	42	35	.30
Infection %	27	28	23	20
Still receiving GC %	82	79	67.	.53
Commenced dialysis %	16	- 3.	1	1