Severity and response to induction therapy in new and relapsing ANCA associated vasculitis patients – Real world practice data

Peter Rutherford, Dieter Götte
Medical Affairs, Vifor Pharma, Zurich, Switzerland

THU0315

BACKGROUND

ANCA-associated vasculitis (AAV) is a disease group which presents highly variable from one patient to another and unpredictable with potentially life-threatening course [1]. The clinical symptoms may range from a localized skin rash to fulminant multisystem disease. Missed or delayed diagnosis influences prognosis strongly if critical organs are involved [2]. Moreover, AAV is characteristically a relapsing disease. Early prediction or recognition of recurrence is particularly important, as any recurrence can further increase morbidity. Treatment usually involves potent immunosuppressive drugs, often with risk of significant side effects [1]. Treatment choice depends on many factors, including age, disease severity, ANCA specificity, renal function, or patients' need. Ideally, induction therapy should enable rapid and sustained response - with minimized side effects

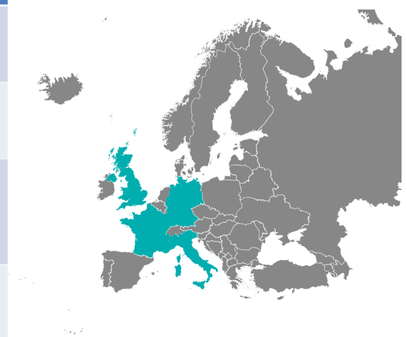
OBJECTIVES

This study examined real world practice of AAV treatment in Europe to understand the AAV severity spectrum and the response to therapy over 12 months.

METHODS

- STUDY DESIGN: Retrospective clinical audit of healthcare records from incident and relapsing AAV patients managed by 399 physicians (240 nephrologists, 120 rheumatologists and 20 internal medicine physicians) who routinely manage incident AAV patients.
- Inclusion & exclusion criteria: Physicians selected incident or relapsing adult patients with granulomatosis with polyangiitis (GPA) or microscopic polyangiitis (MPA) who had initiated remission induction therapy between November 2014 and February 2017. Patients had at least 6 months of therapy and continuous care by the physician over the time of follow, were over 18 years, had a confirmed diagnosis of AAV for at least 12 months, and had received at least one course of induction therapy to achieve remission.
- Data collection and analysis: Physicians completed up to 3 programmed patient record forms (PRF) - this online data collection tool was designed to gather clinical outcome data over the first 12 months of AAV therapy. Data were collected relating to baseline presentation with AAV then outcomes at 1, 3, 6 and 12 months. Descriptive statistics were used to analyze the data.

Sample of 399 Physicians in Europe
UK 60 Nephrologists, 40 Rheumatologists
ITALY 60 Nephrologists, 40 Rheumatologists
FRANCE 60 Nephrologists, 20 Rheumatologists, 20 Internal Medicine
GERMANY 60 Nephrologists, 40 Rheumatologists



RESULTS

- 929 incident and 268 relapsing EU AAV patients receiving care from 399 physicians were studied.
- AAV was diagnosed in 54% of patients with microscopic polyangiitis (MPA) and in 46% of patients with granulomatosis with polyangiitis (GPA).
- Birmingham Vasculitis Activity Score (BVAS, available at www.bvasvdi.org), a validated clinical tool to assess disease activity, was only collected in 12% of the patients. At baseline, differences in disease severity were noted between newly diagnosed patients and relapsing patients. Among the newly diagnosed patients, more than one third (33.6%) of the patients had severe disease, and nearly two-thirds (64.6%) of the relapsing patients had a moderate disease severity (Figure 1).
- Comorbidity was common in all AAV severity groups but was more common in severe patients (71.8% had at least one comorbidity) compared to mild patients (55.1% had at least one).
- Interestingly, nephrologists tended to manage more severe patients (Figure 2).

Figure 1 – AAV disease severity varies in incident and relapsing patients Disease severity was defined as mild (localized disease with no systemic symptoms), moderate (systemic disease with lung and/or kidney involvement) or severe (rapidly progressive systemic disease with lung and/or kidney involvement).

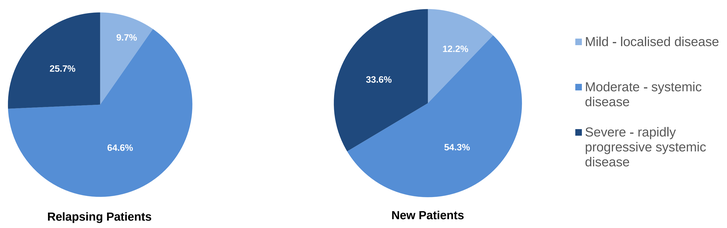
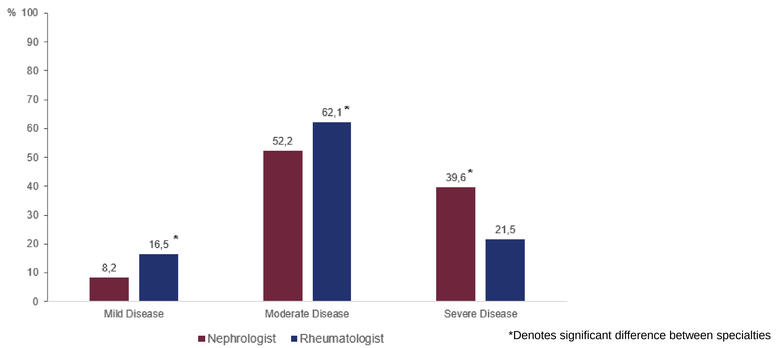


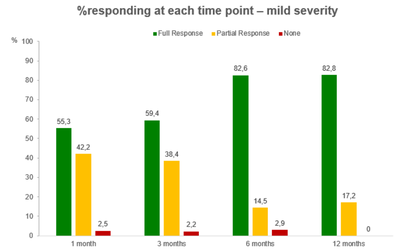
Figure 2 – Nephrologists see more severe patients Data based on 717 patients at Nephrologists; 480 at Rheumatologists

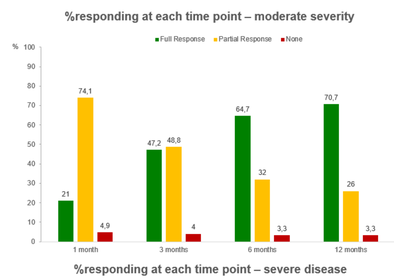


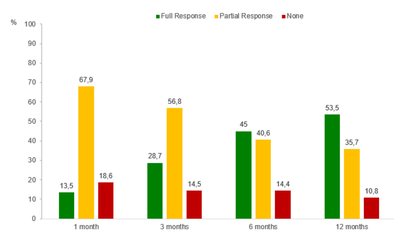
*Denotes significant difference between specialties

RESULTS (cont.)

Figure 3 – Clinical response to therapy depending on disease severity – Clinical response depends on disease severity and tends to be slow (all patients are combined for this analysis)







- Depending on the AAV severity there were differences in the initial remission induction therapy given:
  - Severe – 72.4% cyclophosphamide, 28.4% rituximab and 86.8% glucocorticoids (GC)
  - Moderate – 49.4% cyclophosphamide, 29.6% rituximab and 80.4% glucocorticoids
  - Mild – 23.2% cyclophosphamide, 26.1% rituximab and 69.6% glucocorticoids but 13.8% methotrexate and 8% each MMF and azathioprine
- Since BVAS was not measured routinely, clinical response was categorized as **full** (no vasculitis activity and GC taper on track), **partial** (reduction in AAV activity and major organ damage arrested) and **none** (no improvement in AAV activity).
- Clinical response is presented in Figure 3 (%responding patients) for combination of incident and relapsing patients demonstrating that response varied by severity of the disease when induction therapy commenced, and with many patients having slow and/or incomplete response.

CONCLUSIONS

Incident and relapsing AAV patients have variable disease severity at the time of induction therapy. Response to induction therapy is with few exceptions better in patients with milder AAV. But overall, many patients are slow to respond or have only a partial response event at 12 months to current induction therapy. Comorbidities are common especially in the more severe patients and this must have an impact on clinical outcomes in the short and long term. There is a need for more targeted therapy which can achieve remission in more patients and in a shorter time period.

REFERENCES

1. Yates M, Watts RA, Bajema IM, et al. Ann Rheum Dis 2016; 75: 1583-94
2. Miller A, Chan M, Wiik A, et al. Clin Exp Immunol 2010; 160:143-60

DISCLOSURES. This study was supported by Vifor Fresenius Medical Care Renal Pharma a Vifor Pharma Group Company.