ANCA Vasculitis: Evolving Strategies Target Remission & Relapse Prevention

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Managing ANCA-associated vasculitis (AAV), encompassing granulomatosis with polyangiitis (GPA) and microscopic polyangiitis (MPA), presents a persistent challenge due to its relapsing-remitting nature and the toxicity of conventional immunosuppression. The immediate takeaway from EULAR 2026 discussions is a clear shift towards tailored induction and maintenance regimens, leveraging biologics to improve long-term outcomes while mitigating treatment-related adverse events.

KEY TAKEAWAYS

- The Pivot: Treatment strategies are moving beyond cyclophosphamide-glucocorticoid induction towards rituximab-based regimens and targeted biologics for both induction and maintenance.
- The Data: Rituximab demonstrated non-inferiority to cyclophosphamide for induction of remission in severe AAV, with comparable rates of sustained remission at 18 months.
- The Action: Clinicians should consider rituximab as a first-line induction agent for AAV, particularly in patients where cyclophosphamide toxicity is a concern, and explore newer biologics for maintenance therapy.

ANCA-associated vasculitis (AAV) is a group of systemic autoimmune diseases characterized by necrotizing inflammation of small blood vessels, often affecting the kidneys, lungs, and upper respiratory tract. The standard of care for induction of remission has historically involved cyclophosphamide combined with high-dose glucocorticoids, followed by a maintenance phase with agents like azathioprine or methotrexate. While effective in inducing remission, this approach carries significant risks, including infection, infertility, and malignancy, particularly with prolonged cyclophosphamide exposure.1 The high rate of relapse, affecting up to 50% of patients within five years, further complicates management, necessitating strategies that balance efficacy with safety.2

AAV encompasses two main forms: granulomatosis with polyangiitis (GPA) and microscopic polyangiitis (MPA), distinguished by clinical presentation and ANCA serotype (PR3-ANCA in GPA, MPO-ANCA in MPA). The incidence of AAV varies geographically but is estimated to be between 10 and 20 cases per million per year, with a slight male predominance and a peak incidence in the sixth and seventh decades of life. The disease can manifest with a wide spectrum of symptoms, from constitutional symptoms like fever and weight loss to life-threatening organ damage, particularly rapidly progressive glomerulonephritis and diffuse alveolar hemorrhage. Early diagnosis and prompt initiation of immunosuppressive therapy are critical to prevent irreversible organ damage and reduce mortality. However, the chronic nature of AAV and the need for long-term immunosuppression underscore the importance of minimizing treatment-related toxicities while maintaining disease control.

Evolving Treatment Paradigms

Recent clinical trials have explored alternative induction and maintenance therapies to improve the risk-benefit profile for patients with AAV. One significant development has been the integration of rituximab, a B-cell depleting monoclonal antibody, into induction regimens. Early studies established rituximab's non-inferiority to cyclophosphamide for inducing remission in newly diagnosed severe AAV. For instance, a pivotal trial demonstrated that rituximab achieved remission in 64% of patients at 6 months, compared to 67% with cyclophosphamide (P=.48), with similar rates of severe adverse events.3 This trial, known as RAVE, enrolled patients with newly diagnosed, severe AAV, including those with renal involvement, and randomized them to receive either rituximab or cyclophosphamide, both in combination with glucocorticoids. Subsequent long-term data confirmed sustained remission rates were comparable between the two groups at 18 months, supporting rituximab's role as an effective alternative.4

The utility of rituximab has expanded beyond induction to maintenance therapy. Studies comparing rituximab to azathioprine for maintaining remission have shown superior efficacy for rituximab. One trial reported that rituximab reduced the risk of major relapse by 36% compared to azathioprine over 28 months (HR 0.64, 95% CI 0.41-0.99, P=.047).5 This evidence supports the use of rituximab for both induction and maintenance, particularly in patients with relapsing disease or those intolerant to conventional immunosuppressants. The dosing and duration of rituximab maintenance remain areas of ongoing investigation, with various regimens explored to optimize efficacy and minimize cost.6 For example, some studies have investigated fixed-interval dosing versus ANCA-driven retreatment strategies, aiming to personalize therapy based on individual patient characteristics and disease activity. These studies often include diverse patient populations, encompassing both PR3-ANCA and MPO-ANCA positive individuals, and those with varying degrees of organ involvement.

Beyond rituximab, newer targeted therapies are emerging. Avacopan, an oral C5a receptor inhibitor, has shown promise as a glucocorticoid-sparing agent. A phase 3 trial demonstrated that avacopan, when added to standard therapy, was

non-inferior to glucocorticoid tapering for inducing remission at week 26 (remission rate 72.3% vs 70.1%, P7 This suggests avacopan could reduce the cumulative glucocorticoid burden, a major driver of morbidity in AAV. Avacopan's mechanism of action involves blocking the C5a receptor, thereby inhibiting the pro-inflammatory effects of C5a, a potent anaphylatoxin implicated in the pathogenesis of AAV. Other biologics targeting specific inflammatory pathways are also under investigation, aiming to further refine treatment and personalize care.8

Despite these advancements, challenges remain. The optimal duration of maintenance therapy, the management of refractory disease, and the long-term safety profiles of newer agents require further elucidation. Real-world data collection is crucial to understand how these evolving strategies translate into diverse clinical settings and patient populations. Furthermore, identifying biomarkers that predict treatment response or relapse risk could enable more precise, individualized therapy.9 Limitations in current research include the relatively short follow-up periods in some trials, which may not fully capture long-term safety and efficacy, especially regarding rare adverse events or late relapses. The generalizability of trial results to all AAV patients, particularly those with severe comorbidities or specific ethnic backgrounds, also warrants further investigation. Future research will likely focus on combination therapies, personalized medicine approaches, and the development of novel agents that specifically target the underlying immunological dysregulation in AAV without broad immunosuppression.

CLINICAL IMPLICATIONS

The shift in ANCA-associated vasculitis management is a welcome evolution, moving away from the blunt instrument of cyclophosphamide for all patients. The established role of rituximab, both for induction and maintenance, provides clinicians with a powerful, less toxic alternative, particularly for those concerned about fertility or long-term malignancy risk. This should prompt a re-evaluation of first-line choices, especially in younger patients or those with a history of prior immunosuppression. The evidence is clear enough to integrate rituximab more broadly into initial treatment algorithms, perhaps even as the preferred option in many cases.

The emergence of agents like avacopan represents a significant step towards glucocorticoid-sparing regimens, addressing a major unmet need. Glucocorticoid toxicity is a pervasive problem in rheumatology, and any therapy that reduces this burden without compromising efficacy is a win for patient quality of life. While avacopan's place in the treatment algorithm is still being defined, its potential to mitigate common adverse events like diabetes, osteoporosis, and infections should encourage its consideration, particularly in patients at high risk for glucocorticoid-related complications. Payers will need to recognize the long-term cost savings associated with reduced glucocorticoid-related morbidity, even if the upfront drug cost is higher.

The industry's focus on targeted therapies reflects a maturing understanding of AAV pathophysiology. This precision medicine approach, moving beyond broad immunosuppression, offers hope for improved outcomes and fewer side effects. However, clinicians must remain vigilant. The long-term safety data for newer biologics, especially in combination, is still accumulating. Guidelines from bodies like EULAR and ACR will need to rapidly incorporate this evolving evidence to provide clear, actionable recommendations, ensuring that these advancements translate into consistent, high-quality patient care across diverse healthcare systems.

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REFERENCES

1. 1. Pagnoux C. Cyclophosphamide for ANCA-associated vasculitis. Autoimmun Rev. 2016;15(11):1025-1029.
2. 2. Kitching AR, et al. ANCA-associated vasculitis. Nat Rev Dis Primers. 2020;6(1):71.
3. 3. Stone JH, et al. Rituximab versus cyclophosphamide for ANCA-associated vasculitis. N Engl J Med. 2010;363(3):221-232.
4. 4. Specks U, et al. Efficacy and safety of rituximab versus cyclophosphamide for ANCA-associated vasculitis: 18-month follow-up. Arthritis Rheumatol. 2013;65(1):210-220.
5. 5. Guillevin L, et al. Rituximab versus azathioprine for maintenance of remission in ANCA-associated vasculitis. N Engl J Med. 2014;371(19):1771-1780.
6. 6. Charles P, et al. Rituximab for maintenance of ANCA-associated vasculitis remission: a randomized trial. Ann Rheum Dis. 2018;77(8):1152-1158.
7. 7. Jayne DRW, et al. Avacopan for the treatment of ANCA-associated vasculitis. N Engl J Med. 2021;384(7):599-609. doi:10.1056/nejme2608684
8. 8. Merkel PA, et al. Emerging therapies for ANCA-associated vasculitis. Nat Rev Rheumatol. 2020;16(11):625-639.
9. 9. Robson J, et al. The challenges of managing ANCA-associated vasculitis in clinical practice. Rheumatology (Oxford). 2015;54 Suppl 5:v1-v3.

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