Clinical remission in severe asthma with biologic therapy: an analysis from the UK Severe Asthma Registry

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Abstract

Background Novel biologic therapies have revolutionised the management of severe asthma with more ambitious treatment aims. Here we analyse the definition of clinical remission as a suggested treatment goal and consider the characteristics associated with clinical remission in a large, real-world severe asthma cohort.

Methods This was a retrospective analysis of severe asthma patients registered in the UK Severe Asthma Registry (UKSAR) who met strict national access criteria for biologics. Patients had a pre-biologics baseline assessment and annual review. The primary definition of clinical remission applied included Asthma Control Questionnaire (ACQ)-5 < 1.5 and no oral corticosteroids for disease control and forced expiratory volume in 1 s above lower limit of normal or no more than 100 mL less than baseline.

Results 18.3% of patients achieved the primary definition of remission. The adjusted odds of remission on biologic therapy were 7.44 (95% CI 1.73–31.95)-fold higher in patients with type 2 (T2)-high biomarkers. The adjusted odds of remission were lower in patients who were female (OR 0.61, 95% CI 0.45–0.93), obese (OR 0.49, 95% CI 0.24–0.65) or had ACQ-5 ≥ 1.5 (OR 0.19, 95% CI 0.12–0.31) pre-biologic therapy. The likelihood of remission reduced by 14% (95% CI 0.76–0.97) for every 10-year increase in disease duration. 12–21% of the cohort attained clinical remission depending on the definition applied; most of those who did not achieve remission failed to meet multiple criteria.

Conclusions 18.3% of patients achieved the primary definition of clinical remission. Remission was more likely in T2-high biomarker patients with shorter duration of disease and less comorbidity. Further research on the optimum time to commence biologics in severe asthma is required.

Shareable abstract (@ERSpublications)

Analysis of a real-world severe asthma registry shows clinical remission rates of 18%; associated pre-biologic characteristics include male sex, never smoking, BMI <30 kg·m−2, shorter disease duration, T2-high biomarkers and lower symptom burden https://bit.ly/46JLeDb


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