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Management of severe asthma: a European Respiratory Society/American Thoracic Society guideline

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The ERS/ATS Task Force makes recommendations on the use of novel therapies for severe asthma, specifically biologicals for type 2 high asthma, and antimuscarinic agents and macrolides, as well as on biomarkers for predicting treatment response <http://bit.ly/2kZLRaD>

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ABSTRACT This document provides clinical recommendations for the management of severe asthma. Comprehensive evidence syntheses, including meta-analyses, were performed to summarise all available evidence relevant to the European Respiratory Society/American Thoracic Society Task Force's questions. The evidence was appraised using the GRADE (Grading of Recommendations, Assessment, Development and Evaluation) approach and the results were summarised in evidence profiles. The evidence syntheses were discussed and recommendations formulated by a multidisciplinary Task Force of asthma experts, who made specific recommendations on six specific questions. After considering the balance of desirable and undesirable consequences, quality of evidence, feasibility, and acceptability of various interventions, the Task Force made the following recommendations: 1) suggest using anti-interleukin (IL)-5 and anti-IL-5 receptor α for severe uncontrolled adult eosinophilic asthma phenotypes; 2) suggest using a blood eosinophil cut-point $\geq 150 \mu\text{L}^{-1}$ to guide anti-IL-5 initiation in adult patients with severe asthma; 3) suggest considering specific eosinophil ($\geq 260 \mu\text{L}^{-1}$) and exhaled nitric oxide fraction (≥ 19.5 ppb) cut-offs to identify adolescents or adults with the greatest likelihood of response to anti-IgE therapy; 4) suggest using inhaled tiotropium for adolescents and adults with severe uncontrolled asthma despite Global Initiative for Asthma (GINA) step 4–5 or National Asthma Education and Prevention Program (NAEPP) step 5 therapies; 5) suggest a trial of chronic macrolide therapy to reduce asthma exacerbations in persistently symptomatic or uncontrolled patients on GINA step 5 or NAEPP step 5 therapies, irrespective of asthma phenotype; and 6) suggest using anti-IL-4/13 for adult patients with severe eosinophilic asthma and for those with severe corticosteroid-dependent asthma regardless of blood eosinophil levels. These recommendations should be reconsidered as new evidence becomes available.