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European Respiratory Society guidelines for the diagnosis of asthma in adults

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Asthma diagnosis in adults still remains a challenge with over- and under-diagnosis. Spirometry with reversibility testing is essential. Nitric oxide, peak expiratory flow variability and bronchial challenge testing should also be considered. <https://bit.ly/3ghCigm>

Cite this article as: Louis R, Satia I, Ojanguren I, *et al.* European Respiratory Society guidelines for the diagnosis of asthma in adults. *Eur Respir J* 2022; 60: 2101585 [DOI: 10.1183/13993003.01585-2021].

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This article has an editorial
commentary:
<https://doi.org/10.1183/13993003.00716-2022>

Received: 4 June 2021
Accepted: 10 Jan 2022

Abstract

Although asthma is very common, affecting 5–10% of the population, the diagnosis of asthma in adults remains a challenge in the real world, which results in both over- and under-diagnosis. A taskforce was set up by the European Respiratory Society to systematically review the literature on the diagnostic accuracy of tests used to diagnose asthma in adult patients and provide recommendations for clinical practice. The taskforce defined eight Population, Index, Comparator and Outcome questions that were assessed using the Grading of Recommendations, Assessment, Development and Evaluation approach. The taskforce utilised the outcomes to develop an evidence-based diagnostic algorithm, with recommendations for a pragmatic guideline for everyday practice that was directed by real-life patient experiences.

The taskforce supports the initial use of spirometry followed by bronchodilator reversibility testing (if airway obstruction is present). If initial spirometry fails to show obstruction, further tests should be performed in the following order: exhaled nitric oxide fraction, peak expiratory flow variability, or, in secondary care, bronchial challenge. We present the thresholds for each test that are compatible with a diagnosis of asthma in the presence of current symptoms.

The taskforce reinforces spirometry as a priority and recognises the value of measuring blood eosinophils and serum immunoglobulin E to phenotype the patient. Measuring gas trapping by body plethysmography in patients with preserved forced expiratory volume in 1 s/forced vital capacity ratio deserves further attention. The taskforce draws attention to the difficulty of making a correct diagnosis in patients already

receiving inhaled corticosteroids; the comorbidities that may obscure diagnosis; the importance of phenotyping; and the necessity of considering the patient experience in the diagnostic process.