

The Evolving Role of Pulmonary Function Interpretation: Clinical Implications of the New ERS/ATS Standards in Asthma Care

Instructions for obtaining 1.2 Continuing Medical Education Credits

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CME Items

1. What is the most relevant change in the classification of severity of ventilatory dysfunction in the 2022 ERS/ATS guidelines?
 - a. A percentile-based reference system was introduced instead of the z-score.
 - b. A severity classification based on the lower limit of normality was incorporated.
 - c. A unique z-score-based system with mild, moderate, and severe categories was adopted.
 - d. The need to classify the severity of ventilatory dysfunction in clinical practice was eliminated.
2. What distinguishes the GLI-2023 reference equations from the GLI-2012 equations?
 - a. They introduce a weight-adjusted model to improve diagnostic accuracy.
 - b. They use an inverse weighting model to ensure equitable representation of different racial and ethnic groups.
 - c. They apply a stricter threshold to define obstruction based on the FEV₁ z-score.
 - d. They incorporate DLCO as a mandatory parameter in pulmonary evaluation
3. What criterion was established in the 2022 ERS/ATS guidelines to define a positive bronchodilator response?
 - a. An absolute increase of 200 mL in FEV₁ or FVC.
 - b. An increase of $\geq 10\%$ in FEV₁ or FVC with respect to the predicted value.
 - c. An increase of 12% from the baseline value of FEV₁ or FVC.
 - d. An increase of 15% in the FEV₁/FVC ratio.
4. Which spirometric pattern could precede the development of chronic obstruction?
 - a. Classic restrictive pattern with reduced FVC and TLC.
 - b. Pattern with decreased DLCO and no alteration in the FEV₁/FVC ratio.
 - c. PRISm.
 - d. Fixed obstruction with FEV₁/FVC < 0.7 without bronchodilator response.
5. What is the primary utility of FEV₁Q assessment in adults?
 - a. Determining mortality risk based on functional impairment.
 - b. Monitoring eosinophilic inflammation in patients with severe asthma.
 - c. Classifying the response to inhaled corticosteroid treatment.
 - d. Predicting acute exacerbations in patients with borderline pulmonary function.
6. How should progression of pulmonary function be evaluated in the pediatric population according to the 2022 ERS/ATS guidelines?
 - a. By applying the FEV₁/FVC ratio adjusted for body weight.
 - b. By comparing variability in FEV₁ before and after puberty.
 - c. By using changes in FEV₁ z-score over time.
 - d. By performing repeated DLCO measurements every 6 months.
7. Which of the following parameters differentiates between air trapping and fixed obstruction in asthma?
 - a. Ratio of FVC to SVC.
 - b. Carbon monoxide transfer index (DLCO/VA).
 - c. Daily variability in peak expiratory flow.
 - d. Ratio between specific airway resistance and expiratory reserve volume.
8. What novel aspect in the interpretation of lung volumes was introduced in the 2022 ERS/ATS guidelines?
 - a. Unification of the concept of air trapping and hyperinflation into a single category when the RV/TLC ratio is elevated.
 - b. Elimination of TLC from the classification of ventilatory disorders.
 - c. Replacement of FRC measurement with forced oscillation plethysmography.
 - d. Introduction of DLCO as a primary parameter to define restrictive patterns in the absence of TLC.
9. Which of the following spirometry findings may suggest the presence of dysanapsis?
 - a. Decreased DLCO with a normal DLCO/VA ratio.
 - b. Increased FVC with a significant reduction in the carbon monoxide transfer index.
 - c. Reduced FEV₁ with a bronchodilator response greater than 15%.
 - d. Reduced FEV₁/FVC ratio with normal FEV₁ and FVC values.
10. What is the primary purpose of using the z-score for interpretation of spirometric value?
 - a. To allow standardized comparisons regardless of age, sex, and height.
 - b. To replace lung volume measurement in the assessment of restriction.
 - c. To facilitate interpretation of spirometry findings without the need for population reference values.
 - d. To automatically correct functional alterations derived from environmental exposure.