## Nonasthmatic Eosinophilic Bronchitis: A Systematic Review of Current Treatment Options

Instructions for obtaining 1.3 Continuing Medical Education Credits

Credits can be earned by reading the text and completing the CME examinations online throughout the year on the SEAIC web site at **www.seaic.org** 



"Actividad acreditada por el Consejo Catalán de Formación Continuada de las Profesiones Sanitarias – Comisión de Formación Continuada del Sistema Nacional de Salud con 1,3 CRÉDITOS".



Activity sponsored by Astra Laboratories



AstraZeneca takes no responsibility for the contents of this program

## **CME** Items

- 1. Which pathophysiological findings differ between asthma and NAEB?
  - a. Serum and sputum IL-5 level
  - b. Serum and sputum IL-13 level
  - c. Eosinophil progenitor cell level
  - d. Basement membrane remodeling
  - e. Increased eosinophilia in bronchial epithelium and submucosa
- 2. What percentage of NAEB patients progress to asthma during follow-up?
  - a. 20%-30%
  - b. 5%-15%
  - c. 2%-5%
  - d. 60%-90%
  - e. 50%-60%
- 3. Which of the following can cause chronic cough?
  - a. Airway foreign bodies
  - b. Gastroesophageal reflux disease
  - c. Postnasal drip syndrome
  - d. Pulmonary embolism
  - e. All the above
- 4. For which of the following treatments is there no evidence demonstrating clinical improvement in NAEB?
  - a. Oral prednisone
  - b. Inhaled budesonide
  - c. Mepolizumab
  - d. Leukotriene inhibitor
  - e. Anti-H1 treatment
- In which year was NAEB first described as a disease?
  a. 1995
  - a. 1995
  - b. 1992c. 1980
  - c. 1980d. 1987
  - a. 1987e. 1989
  - e. 1989
- 6. Which of the following sentences is false with respect to NAEB?
  - a. The many randomized controlled studies about treatment of NAEB provide evidence that treatment should be started with high-dose inhaled corticosteroids
  - b. There is a need for studies on the clinical effect of different kinds of corticosteroids, doses, and treatment periods
  - c. Evidence on oral antihistamines for treatment of NAEB is poor
  - d. Avoidance strategies combined with treatment should be considered the first step
  - e. When evaluating treatment of NAEB, it is necessary to consider the marked heterogeneity in selection criteria, interventions, and outcome measures

- 7. What is the underlying pathophysiological mechanism of patients with NAEB that progresses to asthma?
  - a. Bronchial smooth muscle cell proliferation
  - b. Release of cytokines and proinflammatory mediators to peripheral blood
  - c. Presence of cysteinyl-leukotrienes in sputum
  - d. Increased eosinophilia in sputum, bronchial epithelium, and submucosa
  - e. The mechanism is unknown
- 8. Which of the following characteristics has not been related to clinical relapses in NAEB?
  - a. Allergic rhinitis
  - b. Allergic asthma
  - c. Persistent sputum eosinophilia
  - d. Duration of treatment
  - e. Older patient age
- 9. Which of the following sentences is true with respect to FeNO?
  - a. FeNO is unequivocally the best diagnostic biomarker in NAEB
  - Increases in the FeNO value during the study of occupational respiratory diseases is diagnostic of occupational NAEB
  - c. Higher baseline FeNO is a predictor of asthma progression in NAEB
  - d. FeNO level is always progressively correlated with the level of sputum eosinophilia
  - e. Levels of nasal and alveolar NO are significantly higher
- 10. Which of the following characteristics has been related to development of asthma in NAEB patients?
  - a. Increased sputum eosinophilia
  - b. Higher baseline FeNO and the presence of atopy and allergic rhinitis
  - c. Persistent chronic cough and increased sputum eosinophilia
  - d. Cough during childhood
  - e. Family allergy history