

## CME/CE QUESTIONS

**Continuing Medical Education Accreditation**

The University of Cincinnati College of Medicine designates this educational activity for a maximum of 2 Category 1 credits toward the AMA Physician's Recognition Award. Each physician should claim only those hours that he/she actually spends in the educational activity.

The University of Cincinnati College of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor medical education for physicians.

**Continuing Pharmacy Education Accreditation**

*Pharmacy Times* is approved by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. This program is approved for 2 contact hours (0.2 CEU) under the ACPE universal program number of 290-999-04-027-H01.

**Instructions**

After reading "Treatment and Management Options for Reversible Airway Disease," complete the program evaluation and select the 1 best answer to each of the following questions. A statement of continuing education hours will be mailed to those who successfully complete (a minimum score of 70%) the examination at the conclusion of the program.

**1. Chronic obstructive pulmonary disease (COPD) is characterized by progressive airflow obstruction that is often accompanied by:**

- a) Hypocapnia
- b) Pansinusitis
- c) Pulmonary edema
- d) Airway hyperreactivity

**2. COPD is linked to several different systemic sequelae, including:**

- a) Chronic cough and nasal congestion
- b) Chronic bronchitis and emphysema
- c) Cor pulmonale and coccidioidomycosis
- d) Pneumonia and upper respiratory infections

**3. In children the risk factors for asthma include female sex, upper respiratory infections, influenza, and low body weight.**

- a) True
- b) False

**4. Classification of asthma is based on:**

- a) Severity
- b) Sex
- c) Family history
- d) Comorbid conditions

**5. Those who are at most risk for exacerbations are:**

- a) Asthma patients only
- b) COPD patients only
- c) All patients with asthma and COPD
- d) Patients with immune deficiencies only

**6. First-line therapy for overall COPD and related exacerbations is:**

- a) Oxygen therapy
- b) Intravenous methylxanthines
- c) Inhaled bronchodilator therapy
- d) Systemic glucocorticosteroid therapy

**7. Short-acting  $\beta_2$ -agonists include:**

- a) Albuterol and levalbuterol
- b) Tiotropium bromide
- c) Budesonide and fluticasone
- d) All of the above

**8. According to the National Asthma Education and Prevention Program on the Global Initiative for Asthma, inpatient care exacerbations in asthma emphasize the use of inhaled short-acting  $\beta_2$ -agonists while systemic  $\beta_2$ -agonists should be considered only for very severe or nonresponsive cases.**

- a) True
- b) False

**9. The Global Initiative for Chronic Obstructive Lung Disease suggests the addition of systemic corticosteroids to bronchodilators for:**

- a) Patients who smoke
- b) Moderate-to-severe COPD
- c) A viral infection
- d) Eupnea

**10. Antibiotics are recommended for:**

- a) Excessive rhinorrhea and tracheitis
- b) A viral infection
- c) Hypoxia and hypocapnia
- d) Dyspnea with purulent sputum

**11. The prevalence of asthma has been rising in:**

- a) Children but not adults
- b) Men but not women
- c) Blacks but not whites
- d) All groups

**12. The S-isomer of albuterol:**

- a) Is known to be pharmacologically inert
- b) Is responsible for all therapeutic benefits in asthma
- c) Causes effects that may negate the therapeutic effects of the R-isomer
- d) Is metabolized faster than the R-isomer

## CME/CE QUIZ

**13. Because levalbuterol is the pure R-isomer of a selective  $\beta_2$ -agonist, it causes:**

- a) No side effects
- b) No harmful effects on asthmatic symptoms, but dose-related effects on the heart
- c) The same effects as a nonselective  $\beta$ -agonist
- d) The same effects as an  $\alpha$ -antagonist

**14. Compared with equal doses of racemic albuterol, levalbuterol would be:**

- a) Equally effective but safer
- b) Less effective but safer
- c) More effective and at least as safe
- d) More effective but more likely to cause adverse effects

**15. The cost effectiveness of levalbuterol compared with racemic albuterol has been shown in all of the following ways EXCEPT:**

- a) Lower drug acquisition cost per dose
- b) Shorter length of hospital stay
- c) Low number-needed-to-treat to avert one hospitalization
- d) Lower overall cost of treatment

**16. Healthcare expenditures for asthma and COPD are expected to decrease in the near future.**

- a) True
- b) False

**17. Which of the following are challenges that are faced by managed care organizations in the management and treatment of asthma and COPD?**

- a) Lack of acceptance and incorporation into daily practice of clinical guidelines
- b) Suboptimal or undertreatment of asthma and COPD patients
- c) Lack of coverage for preventive care measures such as smoking cessation
- d) All of the above

**18. Which of the following statements is FALSE?**

- a) Asthma and COPD are disease states that primarily affect adults over the age of 65 who are unemployed
- b) During 1994-1996, 14.5 million missed work days occurred as a result of asthma complications
- c) Utilization of healthcare resources in COPD is related to disease severity
- d) Treatment guidelines for asthma and COPD stratify treatment alternatives by disease severity

**19. A tool used by managed care organizations to predict future patient outcomes when taking risk factors of disease progression into account is:**

- a) Statistical progression
- b) Standard outcome theory
- c) Theoretical prediction
- d) Risk modeling

**20. One of the major problems with clinical guidelines is that they are:**

- a) Slow to incorporate new drug treatments
- b) Often too complicated to implement into clinical practice
- c) Lack specific instructions for managing disease states
- d) None of the above

# CME QUIZ

## *For Physicians*

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### CME TEST FORM

(PLEASE PRINT CLEARLY)

Treatment and Management Options  
for Reversible Airway Disease

Please circle your answers:

1. a b c d
2. a b c d
3. a b
4. a b c d
5. a b c d
6. a b c d
7. a b c d
8. a b
9. a b c d
10. a b c d
11. a b c d
12. a b c d
13. a b c d
14. a b c d
15. a b c d
16. a b
17. a b c d
18. a b c d
19. a b c d
20. a b c d

Name/Degree \_\_\_\_\_

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Fax \_\_\_\_\_

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Credit Card (circle one)      VISA      MasterCard

Credit Card Number \_\_\_\_\_

Expiration Date \_\_\_\_\_

Signature (REQUIRED) \_\_\_\_\_

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Release Date: July 2004

Expiration Date: July 31, 2005

A92

### CME Activity Evaluation

#### Answer Form Instructions: Testing and Grading Procedures

1. Each participant achieving a passing grade of 70% or higher on any examination will receive an official computer form stating the number of CME credits earned. This form should be safeguarded and may be used as documentation of credits earned.
2. Participants receiving a failing grade on any exam will be notified and permitted to take 1 reexamination at no cost.
3. All answers should be recorded on the answer form.
4. To receive credit certification electronically, please provide your e-mail address. Detach and mail or fax the test portion of this page to: University of Cincinnati, Office of CME, PO Box 670567, Cincinnati, OH 45267-0567; phone: 513-558-7277; fax: 513-558-1708. Please print clearly to ensure receipt of CME credit.

#### Activity Evaluation

How long did it take you to complete this activity?  
\_\_\_\_\_ minutes

How well did this activity achieve its educational objectives?  
 Very well     Well     Somewhat     Not at all

What overall grade would you assign this activity?  
 A     B     C     D

Did this activity exhibit promotional bias for any pharmaceutical agents?  
 Yes     No

Will you make changes in your practice as a result of information presented in this lesson?  
 Yes     No

## CE QUIZ

### *For Pharmacists*

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#### ANSWER CARD INSTRUCTIONS

##### Testing and Grading Procedures

1. Each participant achieving a passing grade of 70% or higher on any examination will receive an official computer form stating the number of CE credits earned. This form should be safeguarded and may be used as documentation of credits earned.
2. Participants receiving a failing grade on any exam will be notified and permitted to take 1 reexamination at no cost.
3. All answers should be recorded on the answer form. Please print clearly to ensure receipt of CE credit.
4. To receive credit certification electronically, please provide your e-mail address. Detach and mail completed exam form with your \$10.00 payment to *Pharmacy Times* CE Department, 405 Glenn Drive, Suite 4, Sterling, VA 20164-4432; or fax to 703-404-1801.
5. Take the test online with a \$5.00 payment at [www.pharmacytimes.com](http://www.pharmacytimes.com) and receive immediate grading and CE credits, and download your CE statement of credit.

**Please photocopy the test form for additional test takers**



**Pharmacy  
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*Answer card and evaluation form for Pharmacists follow on page S168.*

# CE QUIZ

## *For Pharmacists*

### ANSWER CARD AND EVALUATION FORM

(PLEASE PRINT CLEARLY)

#### PROGRAM EVALUATION

Please mark your level of agreement with the following statements.

(4 = Strongly Agree; 0 = Strongly Disagree)

- |  |           |
|--|-----------|
| 1) Met its stated objectives   | 4 3 2 1 0 |
| 2) Was well organized  | 4 3 2 1 0 |
| 3) Contributed to my knowledge   | 4 3 2 1 0 |
| 4) Presented current and relevant information                          | 4 3 2 1 0 |
| 5) Presented information in a fairly balanced and noncommercial manner | 4 3 2 1 0 |
| 6) Offered information useful in my professional practice              | 4 3 2 1 0 |
| 7) Provided new insights into contemporary pharmacy practice           | 4 3 2 1 0 |

Name/Degree \_\_\_\_\_

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- Check (payable to *Pharmacy Times CE Department*)
- Credit Card (check one)
- VISA                       MasterCard                       American Express

SSN \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Credit Card Number \_\_\_\_\_

Expiration Date \_\_\_\_\_

Signature (REQUIRED) \_\_\_\_\_

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**Expiration Date: July 31, 2005**

**Detach and mail  
completed answer card and  
evaluation form  
with your \$10.00 payment to:**

*Pharmacy Times* CE Department  
405 Glenn Drive  
Suite 4  
Sterling, VA 20164-4432

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#### ANSWER CARD

Please circle your answers:

- |           |           |           |           |           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>I</b>  | <b>2</b>  | <b>3</b>  | <b>4</b>  | <b>5</b>  | <b>6</b>  | <b>7</b>  | <b>8</b>  | <b>9</b>  | <b>10</b> |
| a         | a         | a         | a         | a         | a         | a         | a         | a         | a         |
| b         | b         | b         | b         | b         | b         | b         | b         | b         | b         |
| c         | c         |           | c         | c         | c         | c         |           | c         | c         |
| d         | d         |           | d         | d         | d         | d         |           | d         | d         |
|           |           |           |           |           |           |           |           |           |           |
| <b>11</b> | <b>12</b> | <b>13</b> | <b>14</b> | <b>15</b> | <b>16</b> | <b>17</b> | <b>18</b> | <b>19</b> | <b>20</b> |
| a         | a         | a         | a         | a         | a         | a         | a         | a         | a         |
| b         | b         | b         | b         | b         | b         | b         | b         | b         | b         |
| c         | c         | c         | c         | c         |           | c         | c         | c         | c         |
| d         | d         | d         | d         | d         |           | d         | d         | d         | d         |

## *Treatment and Management Options for Reversible Airway Disease*

### **GOAL**

To provide participants with epidemiology and burden of illness of reversible airway diseases, such as asthma and chronic obstructive pulmonary disease (COPD), its costs, treatment options, and related managed care issues.

### **TARGET AUDIENCE**

This activity is designed for physicians specializing in pulmonary medicine, allergy, and primary care; pharmacists; medical directors; pharmacy directors; group practice directors; hospital directors; home healthcare directors; and other managed care decision makers.

### **EDUCATIONAL OBJECTIVES**

After completing this continuing education activity, the participant should be able to:

- Describe the epidemiology, clinical and economic burden, and natural history of COPD and asthma.
- Review the new therapeutic options available for the treatment of asthma and COPD.
- Compare the cost effectiveness of levalbuterol versus racemic albuterol.
- Discuss the impact of treating and managing asthma and COPD on managed care organizations.

### **CONTINUING MEDICAL EDUCATION ACCREDITATION**

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### **CONTINUING PHARMACY EDUCATION ACCREDITATION**



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### **FUNDING**

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