

## CME/CPE QUESTIONS

### Continuing Medical Education Accreditation

The Johns Hopkins University School 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 credits that he/she actually spends in the activity.

Credits are available from March 31, 2003, until the expiration date of March 31, 2005. **Test # 090001S.**

### Continuing Pharmacy Education Accreditation



This program is approved for 2 hours' credit (0.2 CEUs) and is cosponsored by the University of Tennessee College of Pharmacy who is approved by the American Council on Pharmaceutical Education as a provider of continuing pharmaceutical education. A statement of CE credit will be mailed within 4 weeks of successful completion and evaluation of the program. The course expires March 31, 2005. **ACPE Program # 064-999-03-205-H01.**

**Grievance Policy:** A participant, sponsor, faculty member, or other individual wanting to file a grievance with respect to any aspect of a program sponsored or cosponsored by the UTCOP may contact the Assistant Dean for Continuing Education in writing. The grievance will be reviewed, and a response will be returned within 45 days of receiving the written statement. If not satisfied, an appeal to the Dean of the College of Pharmacy may be made for a second-level review.

### Instructions

After reading this supplement, complete the program evaluation and select the 1 best answer to each of the following questions. At least 14 of the 20 answers must be correct to receive continuing medical or pharmacy education credit.

### CME-CPE: Prevention of the Complications of Diabetes

**1. Which of the following pathologic findings may contribute to early evolution of macrovascular events?**

- a) Endothelial dysfunction
- b) Inflammation
- c) Hypercoagulability
- d) Platelet abnormalities
- e) All of the above

**2. Long-term chronic conditions associated with diabetes mellitus include**

- a) Atherosclerotic disease
- b) Neuropathy
- c) Peripheral nephropathy
- d) Retinopathy
- e) All of the above

**3. According to the 30-year follow-up of the First National Health and Nutrition Examination Survey (NHANES I), changes in age-adjusted heart disease mortality are greatest for**

- a) Diabetic men
- b) Diabetic women
- c) Nondiabetic men
- d) Nondiabetic women
- e) Equivalent for all of the above

**4. According to recent epidemiologic studies, an aggressive treatment approach should be instituted in all patients with diabetes to prevent which of the following conditions, regardless of whether it has been diagnosed?**

- a) Myocardial infarction
- b) Stroke
- c) Hypertension
- d) Dyslipidemia
- e) All of the above

**5. Which of the following metabolic abnormalities is associated with acceleration of atherosclerosis in patients with diabetes mellitus?**

- a) Hypertriglyceridemia
- b) Reduced levels of high-density lipoprotein cholesterol (HDL-C)
- c) Insulin resistance
- d) Impaired glucose tolerance
- e) All of the above

**6. Important vasoactive substances produced by the endothelium include**

- a) Nitric oxide
- b) Prostacyclin
- c) Endothelin
- d) Angiotensin II
- e) All of the above

**7. Abnormalities of platelet function, including increased platelet activity and an increased tendency for thrombus formation, have been documented in which of the following conditions?**

- a) Atherosclerosis
- b) Diabetes mellitus
- c) Heart disease
- d) Hypertension
- e) All of the above

**8. Factors that increase the risk for macrovascular complications of diabetes include**

- a) Smoking
- b) Microalbuminuria
- c) Hyperglycemia
- d) Hypercoagulability
- e) All of the above

## CME/CPE QUIZ

**9. Appropriate management of dyslipidemia in patients with diabetes includes maintaining which of the following lipid levels?**

- a) Low-density lipoprotein cholesterol LDL-C of less than 100 mg/dL
- b) HDL-C levels of more than 45 mg/dL for men and more than 55 mg/dL for women
- c) Triglyceride levels of less than 150 mg/dL
- d) a, b, and c
- e) None of the above

**10. According to the Diabetes Control and Complications Trial (DCCT) and the United Kingdom Prospective Diabetes Study (UKPDS), benefits of maintaining hemoglobin A<sub>1c</sub> at less than 7% include**

- a) Decreased microvascular complications
- b) Decreased macrovascular complications
- c) Improved triglyceride profiles
- d) a and c
- e) a, b, and c

**11. According to the Veterans Affairs High Density Lipoprotein Cholesterol Intervention trial, medications shown to be most effective in treating the dyslipidemia of diabetes mellitus include**

- a) A statin
- b) A fibric acid derivative
- c) A bile acid sequestrant
- d) a and b
- e) a, b, and c

**12. Which of the following antiplatelet agents has been shown to have only marginal efficacy as monotherapy?**

- a) Aspirin
- b) Clopidogrel
- c) Dipyridamole
- d) Ticlopidine
- e) None of the above

**13. Factors associated with the increasing numbers of patients being diagnosed with type 2 diabetes mellitus include**

- a) Age
- b) Weight
- c) Activity level
- d) Diet
- e) All of the above

**14. In managing diabetic neuropathy, which of the following should be performed at least once a year?**

- a) Comprehensive foot examination
- b) Physical examination
- c) Electromyography
- d) Heart-rate variability assessment
- e) All of the above

**15. Which of the following drugs is the only available agent approved for use in all 3 vascular beds as secondary prevention in high-risk patients?**

- a) Aspirin
- b) Clopidogrel
- c) Dipyridamole
- d) Ticlopidine
- e) None of the above

**16. Which single component of diabetes management is most important to prevent complications of diabetes?**

- a) Blood pressure control
- b) Glycemic control
- c) Lipid control
- d) Liberal use of an angiotensin-converting enzyme (ACE) inhibitor
- e) No single component has this role

**17. Which of the following factors is most strongly related to the likelihood of developing retinopathy?**

- a) Having type 1 diabetes
- b) Having type 2 diabetes
- c) Glycemic control
- d) a and c
- e) a, b, and c

**18. Approximately what percentage of patients with type 2 diabetes will develop microalbuminuria and proteinuria?**

- a) Less than 10%
- b) 10% to 30%
- c) 20% to 40%
- d) 50% to 75%
- e) Nearly 90%

**19. In managing diabetic nephropathy, ACE inhibitors act in which of the following ways?**

- a) Decrease intraglomerular pressure by dilating the efferent arteriole
- b) Prevent glomerular hypertrophy
- c) Reduce proteinuria and microalbuminuria
- d) Slow rate of decline of glomerular filtration rate
- e) All of the above

**20. According to available data, ACE inhibitors may have an adverse effect on**

- a) Glucose control
- b) Insulin sensitivity
- c) Lipid metabolism
- d) a, b, and c
- e) None of the above

## CME/CPE QUIZ

### CME PROGRAM EVALUATION

Johns Hopkins University School of Medicine appreciates your opinion on this supplement. Please fill out the questionnaire below and mail it along with your CME test form. We thank you for your evaluation, which is most helpful in planning future programs.

*On the whole, how do you rate the information presented in this supplement?*

excellent    good    fair    poor

*Were the educational objectives achieved?*

yes    no    partially

*Which topic was of most interest to you?*

\_\_\_\_\_

*Which topic was of least interest to you?*

\_\_\_\_\_

*Is the information presented useful in your practice?*

yes    no

*Do you have recommendations to improve this program?*

yes    no

Comments:

\_\_\_\_\_

*Were any portions of this program unsatisfactory or inappropriate?*

yes    no

*If so, which?*

\_\_\_\_\_

*Do you find the information presented in this supplement to be fair, objective, and balanced?*

yes    no

*Is there subject matter you would like included in the future?*

yes    no

Comments:

\_\_\_\_\_

*In your opinion, were the authors biased in their discussion of any commercial product or service?*

yes    no

Comments:

\_\_\_\_\_

*Did the author disclose discussion of off-label drugs and devices?*

yes    no

Please specify:

\_\_\_\_\_

### Prevention of the Complications of Diabetes

Physician Name (optional) \_\_\_\_\_

Address \_\_\_\_\_

City, State, ZIP \_\_\_\_\_

Specialty \_\_\_\_\_

### CME TEST FORM

AJMC Test #090001S

Please circle your answers:

#### Prevention of the Complications of Diabetes

(Test valid from March 31, 2003, through March 31, 2005. No credit will be given after this date.)

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

The amount of time I spent was \_\_\_\_\_ hours \_\_\_\_\_ minutes on \_\_\_\_\_ date.

(PLEASE PRINT CLEARLY)

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State/ZIP \_\_\_\_\_

Phone # \_\_\_\_\_

"I certify that I have completed this educational activity and post-test."

Physician's Name \_\_\_\_\_ degree

Please enclose a check for \$10, payable to American Medical Publishing, and mail with this form to:

**THE AJMC CME Test**  
American Medical Publishing  
241 Forsgate Drive  
Jamesburg, NJ 08831

# CME/CPE QUIZ

## CPE TEST FORM

<p style="text-align: center;"><b>Prevention of the Complications of Diabetes</b></p> <p style="text-align: center;">ACPE Program Number: 064-999-03-205-H01 _____</p> <p><small>(PLEASE PRINT CLEARLY)</small></p> <p>Name _____</p> <p>Home Address _____</p> <p>City _____</p> <p>State/ZIP _____</p> <p>Daytime Phone # _____</p> <p>States in Which CE Credit Is Desired _____</p> <p>Social Security # _____</p>	<p style="text-align: center;">Please circle your answers:</p> <p>1. a b c d e    6. a b c d e    11. a b c d e    16. a b c d e</p> <p>2. a b c d e    7. a b c d e    12. a b c d e    17. a b c d e</p> <p>3. a b c d e    8. a b c d e    13. a b c d e    18. a b c d e</p> <p>4. a b c d e    9. a b c d e    14. a b c d e    19. a b c d e</p> <p>5. a b c d e    10. a b c d e    15. a b c d e    20. a b c d e</p> <p>Please complete the Program Evaluation below and send with \$10 fee, payable to the University of Tennessee, to:</p> <p style="text-align: center;">Glen E. Farr, PharmD University of Tennessee College of Pharmacy 600 Henley Street, Suite 213 Knoxville, TN 37902</p>
--	--

## CPE PROGRAM EVALUATION

The University of Tennessee College of Pharmacy would like to have your opinion. Please fill out the questionnaire below, cut along the dotted line, and mail along with your CPE test form. We thank you for your evaluation, which is most helpful.

*Please circle your answers:*

My pharmacy practice setting is:	Independent	Chain	Hospital	Consultant
The objectives of the lesson were achieved.	Yes	No		
The quality of presentation of the material was:	Excellent	Good	Fair	Poor
The information presented will be useful to me in my practice.	Strongly agree	Mildly agree	Mildly disagree	Strongly disagree

How long did it take you to read the material and respond to the Continuing Education questions? (Please specify the number of hours.)  
\_\_\_\_\_

Please send this evaluation, along with your answer sheet and a \$10 check payable to University of Tennessee, to:

Glen E. Farr, PharmD  
University of Tennessee College of Pharmacy  
600 Henley Street, Suite 213  
Knoxville, TN 37902

---

## *Advances in Diabetes Care: Prevention of the Complications of Diabetes*

### GOAL

To provide comprehensive and current information concerning the prevention of diabetes complications.

### TARGET AUDIENCE

This activity is designed for pharmacy and therapeutics committee members, group practice directors, hospital directors, chief medical staff, home healthcare directors, physicians specializing in endocrinology and primary care, and pharmacists.

### LEARNING OBJECTIVES

Johns Hopkins takes full responsibility for the content, quality, and scientific integrity of this CME activity. Upon completion of this educational supplement, the participant should be able to:

- Name the macrovascular and microvascular diseases associated with diabetes mellitus.
- Explain how select pharmaceutical therapies are used to reduce and prevent complications in the patient with diabetes.
- Describe how a patient with diabetes can manage and prevent complications.

### CONTINUING MEDICAL EDUCATION ACCREDITATION

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the Johns Hopkins University School of Medicine and *The American Journal of Managed Care*. The Johns Hopkins University School of Medicine is accredited by the ACCME to sponsor continuing medical education for physicians.

The Johns Hopkins University School 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 credits that he/she actually spent in the activity.

Credits are available from March 31, 2003, until the expiration date of March 31, 2005.

This CME activity was produced for accreditation under the supervision of Christopher D. Saudek, MD, professor, Department of Endocrinology; director, Johns Hopkins Diabetes Center, Johns Hopkins University School of Medicine; and program director, General Clinical Research Center, Johns Hopkins Health System, Baltimore, Maryland.

### CONTINUING PHARMACY EDUCATION ACCREDITATION



This program is approved for 2 hours' credit (0.2 CEUs) and is cosponsored by the University of Tennessee College of Pharmacy who is approved by the American Council on Pharmaceutical Education as a provider of continuing pharmaceutical education. A statement of CE credit will be mailed within 4 weeks of successful completion and evaluation of the program. The course expires March 31, 2005. **ACPE Program Number: 064-999-03-205-H01.**

**Grievance Policy:** A participant, sponsor, faculty member, or other individual wanting to file a grievance with respect to any aspect of a program sponsored or cosponsored by the UTCOP may contact the assistant dean for Continuing Education in writing. The grievance will be reviewed, and a response will be returned within 45 days of receiving the written statement. If not satisfied, an appeal to the dean of the College of Pharmacy can be made for a second-level review.

### FUNDING

This program is supported by an unrestricted educational grant from **Takeda Pharmaceuticals America**.

• • •

The Johns Hopkins University School of Medicine program *Advances in Diabetes Care: Prevention of the Complications of Diabetes* may include articles on drugs or devices, or uses of drugs or devices, that have not been approved by the Food and Drug Administration (FDA) or have been approved by the FDA for specific uses only. The FDA has stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or device he or she wishes to use in clinical practice. Faculty will disclose discussion of unlabeled/unapproved uses of drugs or devices in their articles.

Johns Hopkins University School of Medicine is committed to the free exchange of medical education. Inclusion of any article in this program, including articles on off-label uses, does not imply any endorsement by Johns Hopkins of the uses, products, or techniques presented.