

Addressing the Clinical and Managed Care Challenges in Treating Diseases of the Aging Eye

Instructions

After reading “Addressing the Clinical and Managed Care Challenges in Treating Diseases of the Aging Eye,” complete the program evaluation and select the single best answer to each of the posttest questions.

A statement of continuing education credit will be provided to those pharmacists who successfully complete and return the answer form and program evaluation and receive a passing grade of 70% or higher on the posttest.

Pharmacist Credit

Accreditation and Credit Designation



Pharmacy Times Office of Continuing Professional Education is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education. This activity is approved for 2.5 contact hours (0.25 CEUs) under the ACPE universal activity number 0290-9999-13-126-H01-P. The activity is available for CE credit through May 10, 2014.

Posttest Questions

Choose the best answer for each of the following:

- Between the ages of 25 and 95 years, the number of retinal ganglion cells in the human eye decreases by approximately what percentage?**
 - 15%
 - 25%
 - 50%
 - 75%
- Increased vascular tone and vasoconstriction of the vascular endothelium is mediated by:**
 - Decreased nitric oxide production
 - Increased nitric oxide production
 - Increased nitrous oxide production
 - Meibomian gland dysfunction
- Each of the following is a clinical feature of dry eye disease, except:**
 - Inflammation of the ocular surface
 - Increased shear stress
 - Drusen formation
 - Tear film instability
- Choroidal neovascularization is mediated primarily by which of the following?**
 - Increased production of epidermal growth factor receptor
 - Decreased production of VEGF
 - Increased production of VEGF
 - Increased production of pigment epithelium-derived factor

5. Pathophysiologically, glaucoma is distinguished from other optic neuropathies by:
 - a. Thickening of the optic nerve head
 - b. Optic nerve cupping
 - c. Proliferation of capillaries under Bruch's membrane
 - d. A decrease in size of the central cup in relation to the overall size of the optic disk
6. Approximately what percentage of US adults with diabetes achieve the recommended targets for glycemic control, blood pressure, and total cholesterol that have been shown to lower the risk of diabetic retinopathy?
 - a. 7%
 - b. 12%
 - c. 17%
 - d. 23%
7. Sjögren's dry eye is a form of which type of dry eye disease?
 - a. Evaporative dry eye disease
 - b. Proliferative dry eye disease
 - c. Meibomian gland-dysfunction dry eye disease
 - d. Aqueous-deficient dry eye disease
8. The ranibizumab dosing schedule used in the phase 3 MARINA and ANCHOR clinical studies for wet AMD was:
 - a. Monthly injection
 - b. Monthly injections for 3 months followed by dosing every 2 months
 - c. Monthly injections for 3 months followed by as-needed dosing
 - d. Injections every other month
9. In the PrONTO study, patients who completed 2 years of treatment with ranibizumab received an average of how many injections?
 - a. 7.5
 - b. 8.9
 - c. 9.9
 - d. 10.4
10. Among patients who received the same treatment regimen for 2 years in the CATT trial, which of the following statements is true?
 - a. As-needed dosing of either agent was statistically superior to monthly dosing
 - b. The best performing group was monthly bevacizumab
 - c. The worst performing group was ranibizumab as needed
 - d. Improvement in mean visual acuity was 1.4 letters worse for bevacizumab versus ranibizumab
11. In the phase 3 VIEW1 and VIEW2 trials of aflibercept for wet AMD, what proportion of patients in the aflibercept treatment arms maintained their vision at 1 year?
 - a. 89% to 90%
 - b. 91% to 94%
 - c. 95% to 96%
 - d. 97% to 98%
12. Data from randomized clinical trials indicate that intraocular pressure should be lowered by what percentage from baseline to reduce the risk of glaucoma progression and vision loss?
 - a. $\geq 15\%$
 - b. $\geq 20\%$
 - c. $\geq 25\%$
 - d. $\geq 35\%$
13. Bimatoprost is an example of which type of ocular medication for open-angle glaucoma?
 - a. Beta blocker
 - b. Prostaglandin analogue
 - c. Alpha blocker
 - d. Carbonic anhydrase inhibitor
14. At the 2-year follow-up in the RISE study of ranibizumab for DME, what proportion of patients in the ranibizumab 0.3 mg treatment group gained at least 15 letters in best-corrected visual acuity?
 - a. 29.6%
 - b. 39.2%
 - c. 44.8%
 - d. 52.4%

15. Which of the following was not a dosing schedule in the DA VINCI study of ranibizumab for DME?
- Ranibizumab 0.5 mg monthly
 - Ranibizumab 2.0 mg monthly
 - Ranibizumab 2.0 mg every 2 months
 - None of the above
16. The most common adverse event associated with topical cyclosporine 0.05% in the 2 randomized phase 3 trials of this agent for dry eye was:
- Discharge from the eye
 - Transient burning of the eye
 - Foreign body sensation
 - Eye pain
17. Which of the following statements is true regarding findings from a 2001 to 2006 Medical Expenditure Panel Survey on glaucoma medication use?
- Mean expenditures increased significantly among patients with a higher education (ie, at least a college degree)
 - Expenditures increased significantly for beta blockers
 - Expenditures increased significantly for prostaglandin analogues
 - Enrollment in Medicare part D had no effect on medication expenditures
18. A recent US study on the comparative cost-effectiveness of ranibizumab and bevacizumab for wet AMD found an ICER of _____ for bevacizumab relative to ranibizumab to gain 1 additional QALY.
- \$28,345
 - \$46,592
 - \$54,649
 - \$71,122
19. Among patients with DME, which group has been excluded from randomized, controlled trials of anti-VEGF therapy or intravitreal triamcinolone and could potentially benefit from less expensive treatments?
- Patients with good visual acuity (>20/32)
 - Patients with very poor visual acuity (20/200-20/320)
 - Patients with pseudophakic eyes
 - Patients with concurrent geographic atrophy
20. Increased expenditures for dry eye disease in recent years have been driven largely by which medication?
- Blephamide
 - Topical prednisone
 - Aflibercept
 - Topical cyclosporine 0.05%

Pharmacy Credit

Instructions for Receiving Continuing Pharmacy Education (CPE) Credit: Testing and Grading Information

1. This lesson is FREE online; receive instant grading and download your certificate at www.PharmacyTimes.com.
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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, please detach and mail or fax the test portion of this page to:

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Posttest Answer and Evaluation Form follows.

ACE011

CPE Answer Form and Evaluation

Please print clearly.

CE Answer Form: MAY 10, 2013 • ADDRESSING THE CLINICAL AND MANAGED CARE CHALLENGES IN TREATING DISEASES OF THE AGING EYE				
ACTIVITY 0290-9999-13-126-H01-P (TEST VALID THROUGH MAY 10, 2014. NO CREDIT WILL BE GIVEN AFTER THIS DATE.)				
1. a b c d	5. a b c d	9. a b c d	13. a b c d	17. a b c d
2. a b c d	6. a b c d	10. a b c d	14. a b c d	18. a b c d
3. a b c d	7. a b c d	11. a b c d	15. a b c d	19. a b c d
4. a b c d	8. a b c d	12. a b c d	16. a b c d	20. a b c d
<input type="checkbox"/> Presently Enrolled in CE Program		<input type="checkbox"/> Nonsubscriber Participant Pharmacist		
Name:		E-mail:		
Address:				
City:		Zip:	Daytime Phone:	
Specialty: <input type="checkbox"/> Pharmacist <input type="checkbox"/> Pharmacy Technician <input type="checkbox"/> Other (Specify)				
NABP e-Profile Number:			Date of Birth (MM/DD Format):	

CE Evaluation Form: MAY 10, 2013 • ADDRESSING THE CLINICAL AND MANAGED CARE CHALLENGES IN TREATING DISEASES OF THE AGING EYE					
Please rate the effectiveness of this activity. Your input and comments are encouraged and appreciated.					
	Poor		Average		Excellent
1. Overall, how would you rate this activity?	1	2	3	4	5
2. Overall, how would you rate the work of the instructor(s)?	1	2	3	4	5
3. How would you rate the quality of the instructional materials?	1	2	3	4	5
4. Were the learning objectives of this activity met?	Not at all		Partially		Completely
(Objective 1)	1	2	3	4	5
(Objective 2)	1	2	3	4	5
(Objective 3)	1	2	3	4	5
(Objective 4)	1	2	3	4	5
5. Was the activity useful and relevant to your practice?	1	2	3	4	5
6. Do you believe the subject matter was presented objectively? Yes No If no, please explain: _____					
7. Do you intend to make any changes to your practice based on learnings from this program? a. Yes b. No If yes , which of the following changes do you intend to implement? (Please select all that apply) a. Provide more in-depth counseling to patients b. Proactively talk to patients with this disease/problem/issue c. Educate staff to better help patients d. Seek more resources to provide to patients e. Implement disease management program f. Improve monitoring for adherence/persistence g. Other _____ h. None		8. Do you anticipate any barriers in trying to implement changes in your practice? a. Yes b. No c. Don't know If yes , what barriers do you anticipate? (Please select all that apply) a. Lack of time b. Lack of resources c. Lack of pharmacy technician help d. Corporate focus is elsewhere e. Legal issues f. Insurance issues/restrictions g. Patients don't want this service or have no time h. Other _____ i. None		9. Based on the learning from this activity, overall how confident are you in your ability to counsel/educate/manage the disease/condition/problem (1 being NOT confident and 5 being VERY confident)? a. 1 (Not confident) b. 2 c. 3 (Somewhat confident) d. 4 e. 5 (Very confident)	
		10. What other topics related to this topic would you like to explore in future CE activities? _____ _____ _____			

Please mail this form to: Pharmacy Times Office of Continuing Professional Education, 666 Plainsboro Road, Suite 356, Plainsboro, NJ 08536