

Oncology Practice™

U P D A T E

An Audio Review Journal for Medical Oncologists,
Oncology Nurse Practitioners and Physician Assistants

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INTERVIEWS

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**Optimal Management
of Side Effects and
Toxicities from
Systemic Therapy:
*Breast Cancer,
Multiple Myeloma***

CME
Certified

CNE
Activity



Oncology Practice Update

A Continuing Education Audio Series

OVERVIEW OF ACTIVITY

The past decade has marked an explosion in the number of new agents and regimens available for the treatment of the most common solid tumors and hematologic cancer afflicting the population at large. One of the most confounding aspects of cancer management is that almost every one of the drugs utilized to provide a potential cure, prolong life or palliate disease-related symptoms brings with it bothersome, debilitating or potentially fatal side effects that can dramatically limit the duration of therapy, attenuate long-term survival and affect quality of life in both the short and long term.

Historically, the clinician's focus on side-effect management related mainly to those toxicities associated with chemotherapeutic agents. Although that continues to be a challenge, the recent introduction of new targeted therapies has forced these individuals to suddenly wear a number of primary care hats in order to manage a spectrum of novel toxicities. As such, now more than ever clinicians need educational activities focused on this crucial aspect of cancer management.

This unique activity will provide practicing oncology clinicians access to the opinions of oncology clinical investigators with expertise in the management of toxicities related to cancer and its treatment. This will help them increase their knowledge base, stay up to date and optimally deliver state-of-the-art, comprehensive, therapeutic and supportive care for patients with cancer.

LEARNING OBJECTIVES

- Discuss the benefits and risks associated with therapies used in the treatment of breast cancer and multiple myeloma, including bone-targeted agents, immunomodulatory drugs, proteasome inhibitors, chemotherapy regimens and aromatase inhibitors.
- Develop a plan of care to manage the side effects associated with these therapies to support quality of life and continuation of treatment.
- Recommend evidence-based alternative therapies when treatment-induced toxicities adversely affect quality of life.

CREDIT DESIGNATION STATEMENT

CNE INFORMATION

Nurse Practitioners and Nurses: This educational activity for 1.5 contact hours is provided by Research To Practice during the period of April 2010 to April 2011.

Research To Practice is an approved provider of continuing nursing education by NJSNA, an accredited approver, by the American Nurses Credentialing Center's Commission on Accreditation.

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Physicians and Physician Assistants: Research To Practice designates this educational activity for a maximum of 1.5 *AMA PRA Category 1 Credits™*. Physicians and Physician Assistants should only claim credit commensurate with the extent of their participation in the activity.

Research To Practice is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

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QUESTIONS (PLEASE CIRCLE ANSWER):

1. Which of the following agents is administered by subcutaneous injection?
 - a. Bortezomib
 - b. Denosumab
 - c. Lenalidomide
 - d. Zoledronic acid
2. In patients receiving the immunomodulatory drugs (IMiDs[®]) lenalidomide or thalidomide for multiple myeloma, which of the following factors increase their risk of thromboembolic events?
 - a. Receiving an anthracycline in combination with an IMiD
 - b. Having an indwelling catheter
 - c. Having a history of a thromboembolic event
 - d. Being immobile or less mobile than normal
 - e. All of the above
3. The dose of lenalidomide should be adjusted and the agent should be used with caution when treating patients with multiple myeloma and renal insufficiency.
 - a. True
 - b. False
4. Palumbo and colleagues presented data from a clinical trial evaluating bortezomib/melphalan/prednisone and thalidomide in patients with newly diagnosed multiple myeloma that showed the rates of peripheral neuropathy were significantly reduced when bortezomib was administered _____ rather than twice a week.
 - a. Once a day
 - b. Once a week
 - c. Once a month
5. Which of the following bone-directed agents specifically binds and inactivates RANK ligand, thereby limiting osteoclast activation?
 - a. Bortezomib
 - b. Clodronate
 - c. Denosumab
 - d. Zoledronic acid
6. Michael Wang and colleagues at MD Anderson are conducting a single-arm study to evaluate the use of acupuncture to ameliorate treatment-induced _____.
 - a. Hypertension
 - b. Peripheral neuropathy
 - c. Osteonecrosis of the jaw
 - d. Renal dysfunction
7. MD Anderson is planning to open a trial evaluating the effectiveness of curcumin, the active ingredient of the spice turmeric, in reducing side effects from prolonged _____ therapy.
 - a. Bortezomib
 - b. Denosumab
 - c. Lenalidomide
 - d. Thalidomide
8. Osteonecrosis of the jaw is a toxicity associated with which class of drugs?
 - a. Bisphosphonates
 - b. Immunomodulatory drugs
 - c. Proteasome inhibitors
 - d. Aromatase inhibitors
9. Long-term risks associated with anthracycline therapy include which of the following?
 - a. Congestive heart failure
 - b. Leukemia
 - c. Osteonecrosis of the jaw
 - d. Both a and b
 - e. None of the above
10. For patients who experience aromatase inhibitor-induced arthralgias and myalgias, switching to a second aromatase inhibitor may be effective in ameliorating these symptoms.
 - a. True
 - b. False

Successful completion of the self assessment (Post-test) is required to earn CNE contact hours. Successful completion is defined as a cumulative score of at least 70 percent correct on the Post-test.

EDUCATIONAL ASSESSMENT AND CREDIT FORM

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Research To Practice is committed to providing valuable continuing education for oncology clinicians, and your input is critical to helping us achieve this important goal. Please take the time to assess the activity you just completed, with the assurance that your answers and suggestions are strictly confidential.

PART ONE — Please tell us about your experience with this educational activity

How would you characterize your level of knowledge on the following topics?

	4 = Excellent	3 = Good	2 = Adequate	1 = Suboptimal
	BEFORE			AFTER
Prevention of IMiD-associated thrombosis in multiple myeloma	4	3	2	1
Clinical strategies to reduce treatment-induced peripheral neuropathy in management of myeloma	4	3	2	1
Long-term risks related to adjuvant anthracycline therapy	4	3	2	1
Management of arthralgias/myalgias linked to aromatase inhibitors	4	3	2	1
Use of growth factor support with myelosuppressive chemotherapy regimens in breast cancer	4	3	2	1

Has the activity unfairly influenced you toward a particular product or service?

Yes No

If yes, then describe what was presented:.....

Will this activity help you improve patient care?

Yes No Not applicable

If yes, how will it help you improve patient care?.....

Did the activity meet your educational needs and expectations?

Yes No

If no, please explain:.....

Please respond to the following learning objectives (LOs) by circling the appropriate selection:

4 = Yes 3 = Will consider 2 = No 1 = Already doing N/M = LO not met N/A = Not applicable

As a result of this activity, I will be able to:

- Discuss the benefits and risks associated with therapies used in the treatment of breast cancer and multiple myeloma, including bone-targeted agents, immunomodulatory drugs, proteasome inhibitors, chemotherapy regimens and aromatase inhibitors. 4 3 2 1 N/M N/A
- Develop a plan of care to manage the side effects associated with these therapies to support quality of life and continuation of treatment. 4 3 2 1 N/M N/A
- Recommend evidence-based alternative therapies when treatment-induced toxicities adversely affect quality of life. 4 3 2 1 N/M N/A

EDUCATIONAL ASSESSMENT AND CREDIT FORM (continued)

What other practice changes will you make or consider making as a result of this activity?

What additional information or training do you need on the activity topics or other oncology-related topics?

Additional comments about this activity:

As part of our ongoing, continuous quality-improvement effort, we conduct postactivity follow-up surveys to assess the impact of our educational interventions on professional practice. Please indicate your willingness to participate in such a survey.

- Yes, I am willing to participate in a follow-up survey.
- No, I am not willing to participate in a follow-up survey.

PART TWO — Please tell us about the faculty and editor for this educational activity

4 = Excellent 3 = Good 2 = Adequate 1 = Suboptimal

Faculty	Knowledge of subject matter				Effectiveness as an educator			
Robert Z Orlowski, MD, PhD	4	3	2	1	4	3	2	1
Hyman B Muss, MD	4	3	2	1	4	3	2	1
Editor	Knowledge of subject matter				Effectiveness as an educator			
Neil Love, MD	4	3	2	1	4	3	2	1

Please recommend additional faculty for future activities:

Other comments about the faculty and editor for this activity:

REQUEST FOR CREDIT — Please print clearly

Name: Specialty:

Professional Designation:

- MD DO PharmD NP RN PA Other

Street Address: Box/Suite:

City, State, Zip:

Telephone: Fax:

Email:

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I certify my actual time spent to complete this educational activity to be _____ hour(s).

Signature: Date:

OPU110

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