

Oncology Nursing™

U P D A T E

Clinical Investigator and Nursing Perspectives
on the Management of Common Cancers

FACULTY INTERVIEWS

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EDITOR

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**BREAST CANCER
EDITION**



Oncology Nursing Update Breast Cancer Edition

A Continuing Nursing Education Audio Series

OVERVIEW OF ACTIVITY

Breast cancer is one of the most rapidly evolving fields in oncology nursing and is a major public health concern, with more than 230,000 new cases and 40,000 deaths from metastatic breast cancer expected in the United States during 2013. Patients with estrogen and/or progesterone receptor-positive (ER/PR-positive) and/or HER2-positive disease account for the majority of patients with metastatic breast cancer, and recently the emergence of new and critical data sets has seemingly transformed clinical management on an almost daily basis. To provide oncology nurses with therapeutic strategies to address the disparate needs of these patients with metastatic breast cancer, the *Oncology Nursing Update* audio series employs one-on-one interviews with medical oncologists and nurses with expertise in the field. Upon completion of this CNE activity, oncology nurses should be able to formulate an up-to-date and more complete approach to the care of patients with ER/PR-positive and/or HER2-positive metastatic breast cancer.

LEARNING OBJECTIVES

- Describe the influence of tumor phenotypes in tailoring systemic treatment decisions.
- Discuss the benefits and risks associated with systemic therapies used in the evidence-based treatment of metastatic breast cancer, including endocrine agents, chemotherapy regimens and biologic treatments.
- Develop a plan to manage the side effects associated with these therapies to support quality of life and continuation of treatment.
- Recognize the recent FDA approvals of ado-trastuzumab emtansine (T-DM1), pertuzumab and everolimus, and identify clinical situations for which these agents may be appropriate therapeutic options.
- Identify opportunities to enhance the collaborative role of oncology nurses in the comprehensive biopsychosocial care of patients with breast cancer.

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CREDIT DESIGNATION STATEMENT

This educational activity for 1.5 contact hours is provided by Research To Practice during the period of November 2013 through November 2014.

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This is an audio CNE program. This booklet contains CNE information, including learning objectives, faculty disclosures, a Post-test and an Educational Assessment and Credit Form. The corresponding website ResearchToPractice.com/ONUBreast113 also includes links to relevant abstracts and full-text articles.

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SELECT PUBLICATIONS

A study of trastuzumab emtansine (T-DM1) plus pertuzumab/pertuzumab placebo versus trastuzumab [Herceptin] plus a taxane in patients with metastatic breast cancer (MARIANNE). NCT01120184

Baselga J et al. Everolimus in postmenopausal hormone-receptor-positive advanced breast cancer. *N Engl J Med* 2012;366(6):520-9.

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Burriss HA 3rd et al. Health-related quality of life of patients with advanced breast cancer treated with everolimus plus exemestane versus placebo plus exemestane in the phase 3, randomized, controlled, BOLERO-2 trial. *Cancer* 2013;119(10):1908-15.

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Capelan M et al. Pertuzumab: New hope for patients with HER2-positive breast cancer. *Ann Oncol* 2013;24(2):273-82.

Cortes J et al. Health-related quality-of-life assessment in CLEOPATRA, a phase III study combining pertuzumab with trastuzumab and docetaxel in metastatic breast cancer. *Ann Oncol* 2013;24(10):2630-5.

Datko FM et al. Phase II study of pertuzumab, trastuzumab, and weekly paclitaxel in patients with HER2-overexpressing metastatic breast cancer (MBC). *Proc ASCO* 2013; **Abstract 606**.

Gnant M et al. Effect of everolimus on bone marker levels and progressive disease in bone in BOLERO-2. *J Natl Cancer Inst* 2013;105(9):654-63.

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Johnston S et al. Lapatinib combined with letrozole versus letrozole and placebo as first-line therapy for postmenopausal hormone receptor-positive metastatic breast cancer. *J Clin Oncol* 2009;27(33):5538-46.

Kaufman B et al. Trastuzumab plus anastrozole versus anastrozole alone for the treatment of postmenopausal women with human epidermal growth factor receptor 2-positive, hormone receptor-positive metastatic breast cancer: Results from the randomized phase III TAnDEM study. *J Clin Oncol* 2009;27(33):5529-37.

Krop IE et al. A phase II study of trastuzumab emtansine in patients with human epidermal growth factor receptor 2-positive metastatic breast cancer who were previously treated with trastuzumab, lapatinib, an anthracycline, a taxane, and capecitabine. *J Clin Oncol* 2012;30(26):3234-41.

O'Regan R et al. Phase III, randomized, double-blind, placebo-controlled multicenter trial of daily everolimus plus weekly trastuzumab and vinorelbine in trastuzumab-resistant, advanced breast cancer (BOLERO-3). *Proc ASCO* 2013; **Abstract 505**.

Paplomata E et al. Everolimus: Side effect profile and management of toxicities in breast cancer. *Breast Cancer Res Treat* 2013;140(3):453-62.

Peddi PF et al. Noninfectious pneumonitis with the use of mTOR inhibitors in breast cancer. *Cancer Treat Rev* 2013; [Epub ahead of print].

Perez AT et al. Incidence, management, and resolution of stomatitis and noninfectious pneumonitis in BOLERO-2. *Breast Cancer Symposium* 2013; **Abstract 159**.

Peterson ME. **Management of adverse events in patients with hormone receptor-positive breast cancer treated with everolimus: Observations from a phase III clinical trial.**

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Oncologist 2010;15(9):944-53.

Swain SM et al. **Pertuzumab, trastuzumab, and docetaxel for HER2-positive metastatic breast cancer (CLEOPATRA study): Overall survival results from a randomised, double-blind, placebo-controlled, phase 3 study.** *Lancet Oncol* 2013;14(6):461-71.

Swain SM et al. **Cardiac tolerability of pertuzumab plus trastuzumab plus docetaxel in patients with HER2-positive metastatic breast cancer in CLEOPATRA: A randomized, double-blind, placebo-controlled phase III study.** *Oncologist* 2013;18(3):257-64.

SWOG-S1207: A Phase III randomized, placebo-controlled clinical trial evaluating the use of adjuvant endocrine therapy +/- one year of everolimus in patients with high-risk, hormone receptor-positive and HER2/neu negative breast cancer. NCT01674140

Verma S et al; EMILIA Study Group. **Trastuzumab emtansine for HER2-positive advanced breast cancer.** *N Engl J Med* 2012;367(19):1783-91.

QUESTIONS (PLEASE CIRCLE ANSWER):

1. Everolimus is an _____ recently approved in combination with exemestane for postmenopausal women with advanced ER-positive, HER2-negative breast cancer after failure of treatment with letrozole or anastrozole.
 - a. Anti-angiogenic agent
 - b. Antibody-drug conjugate
 - c. mTOR inhibitor
2. Which of the following side effects are commonly observed in patients who receive everolimus/exemestane?
 - a. Mucositis/stomatitis
 - b. Rash
 - c. Fatigue
 - d. All of the above
3. Which of the following is an acceptable strategy to follow for the prevention and management of everolimus-related stomatitis?
 - a. Discontinuation of everolimus for patients with substantial stomatitis
 - b. Dose reduction of everolimus for patients with mild stomatitis
 - c. Use of prophylactic steroid mouth-wash
 - d. All of the above
4. The mechanism of action of pertuzumab _____.
 - a. Is the same as that of trastuzumab
 - b. Is distinct from that of trastuzumab because pertuzumab binds to the dimerization domain of HER2
 - c. Allows for its use in combination with trastuzumab
 - d. Both b and c
5. In the CLEOPATRA study, how long did patients continue pertuzumab and trastuzumab?
 - a. Until disease progression
 - b. For at least 6 cycles
 - c. Until docetaxel discontinuation
6. In terms of side effects, what was observed with the addition of pertuzumab to trastuzumab/docetaxel in the CLEOPATRA study?
 - a. Higher incidence of febrile neutropenia and rash
 - b. No increase in heart failure or cardiomyopathy
 - c. Both a and b
7. T-DM1 is an antibody-drug conjugate that combines trastuzumab with the highly active chemotherapy DM1, a maytansine derivative.
 - a. True
 - b. False
8. In the EMILIA study, which side effects were more commonly observed with T-DM1 compared to capecitabine/lapatinib?
 - a. Transaminitis
 - b. Thrombocytopenia
 - c. Diarrhea
 - d. Nausea/vomiting
 - e. Both a and b

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PART 1 — 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
Benefits and side effects of everolimus/exemestane in postmenopausal patients with ER/PR-positive metastatic breast cancer	4 3 2 1	4 3 2 1
Emerging clinical strategies to prevent and manage everolimus-associated mucositis/stomatitis	4 3 2 1	4 3 2 1
Results of the CLEOPATRA trial combining pertuzumab with trastuzumab/docetaxel as first-line therapy for patients with HER2-positive metastatic breast cancer	4 3 2 1	4 3 2 1
Survival advantage and safety of T-DM1 compared to capecitabine/lapatinib as second- or later-line treatment for patients with HER2-positive metastatic breast cancer in the EMILIA trial	4 3 2 1	4 3 2 1
Importance of monitoring platelet counts and liver function tests in patients receiving T-DM1	4 3 2 1	4 3 2 1

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

Yes No

If yes, please 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:

- Describe the influence of tumor phenotypes in tailoring systemic treatment decisions.4 3 2 1 N/M N/A
- Discuss the benefits and risks associated with systemic therapies used in the evidence-based treatment of metastatic breast cancer, including endocrine agents, chemotherapy regimens and biologic treatments.....4 3 2 1 N/M N/A
- Develop a plan 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
- Recognize the recent FDA approvals of ado-trastuzumab emtansine (T-DM1), pertuzumab and everolimus, and identify clinical situations for which these agents may be appropriate therapeutic options.4 3 2 1 N/M N/A
- Identify opportunities to enhance the collaborative role of oncology nurses in the comprehensive biopsychosocial care of patients with breast cancer.....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:

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

PART 2 — Please tell us about the faculty and editor for this educational activity

Table with 4 columns: 4 = Excellent, 3 = Good, 2 = Adequate, 1 = Suboptimal. Rows include Faculty (Carrie Tompkins Stricker, Sara A Hurvitz, MD) and Editor (Neil Love, MD) with ratings for Knowledge of subject matter and Effectiveness as an educator.

Please recommend additional faculty for future activities:

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