

Clinical Investigator and Nursing Perspectives on the Management of HER2-Positive Breast Cancer

OVERVIEW OF ACTIVITY

Breast cancer is one of the most rapidly evolving fields in oncology nursing. Although overlap exists with regard to a number of treatment-related issues and phenotypic presentation (eg, presence or absence of estrogen and/or progesterone receptors and HER2 status), each of these distinct disease subtypes has its own diagnostic, management and supportive care considerations and challenges that warrant education and discussion. As such it is quite rational and in some ways preferable to undertake education focused on 1 specific phenotype rather than breast cancer in its entirety.

In this regard and among the 3 phenotypes, HER2-positive breast cancer perhaps stands alone in terms of educational need as the continuing emergence of new and critical data sets seemingly transforms clinical management on an almost daily basis. To provide oncology nurses with therapeutic strategies to address the disparate needs of patients with HER2-positive 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 HER2-positive breast cancer.

LEARNING OBJECTIVES

- Discuss the benefits and risks associated with evidence-based systemic therapies used in the treatment of HER2-positive breast cancer, including chemotherapy and HER2-targeted therapies.
- Develop a plan of care to manage the side effects associated with these therapies to support quality of life and continuation of treatment.
- Evaluate the preliminary safety profiles and response outcomes observed in studies of novel and newly approved anti-HER2 targeted agents for patients with locally advanced and metastatic HER2-positive disease.
- Identify opportunities to enhance the collaborative role of oncology nurses in the comprehensive biopsychosocial care of patients with breast cancer.

ACCREDITATION STATEMENT

Research To Practice is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

CREDIT DESIGNATION STATEMENT

This educational activity for 1.5 contact hours is provided by Research To Practice during the period of December 2012 through December 2013.

HOW TO USE THIS CNE ACTIVITY

This is an audio CNE program. This website contains CNE information, including learning objectives, faculty disclosures, a Post-test and an Educational Assessment and Credit Form, as well as links to relevant abstracts and full-text articles.

To receive credit, participants should read the learning objectives and faculty disclosures, listen to the audio MP3s and complete the Post-test and Educational Assessment and Credit Form located at ResearchToPractice.com/ONUBreast112/CNE. A statement of CNE credit will be issued only upon completion of the Post-test, with a score of 75% or better, and the Educational Assessment and Credit Form. Your statement of credit will be mailed to you within 3 weeks or may be printed online.

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FACULTY — The following faculty (and their spouses/partners) reported real or apparent conflicts of interest, which have been resolved through a conflict of interest resolution process:

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Hardware/Software Requirements:

A high-speed Internet connection
A monitor set to 1280 x 1024 pixels or more
Internet Explorer 7 or later, Firefox 3.0 or later, Chrome, Safari 3.0 or later
Adobe Flash Player 10.2 plug-in or later
Macromedia Flash plug-in 6.0 or greater
Adobe Acrobat Reader
(Optional) Sound card and speakers for audio

There is no implied or real endorsement of any product by RTP or the American Nurses Credentialing Center.

INTERVIEW WITH MS ARMSTRONG

- **Case discussion:** *A 51-year-old woman with HER2-positive metastatic breast cancer and CNS metastasis*
 - Continuation of anti-HER therapy beyond disease progression
 - Treatment of patients with CNS metastases
 - Management of side effects associated with lapatinib
- **Case discussion:** *A patient with ER-positive, HER2-positive breast cancer and metastases to the lung, brain, liver and lymph nodes*
 - Importance of rebiopsying sites of metastatic disease
 - Mechanism of action of trastuzumab emtansine (T-DM1)
 - Tolerability of T-DM1
- Neoadjuvant therapeutic options for patients with locally advanced HER2-positive breast cancer
- Tolerance of TCH in younger versus older patients
- Selection of anthracycline- and nonanthracycline-containing adjuvant regimens for patients with HER2-positive breast cancer

INTERVIEW WITH DR CAREY

- **Case discussion:** *A 36-year-old woman with ER-negative, HER2-positive breast cancer initially treated with preoperative chemotherapy/trastuzumab on the CALGB-40601 trial*
 - Incidence of anthracycline-associated leukemias
- **Case discussion:** *A 71-year-old woman with Stage III, ER-negative, HER2-positive breast cancer who refused radiation and systemic therapy after lumpectomy*
 - Family support and patient coping with breast cancer and its treatment
 - Importance of education for patients receiving capecitabine/lapatinib
 - Side effects associated with capecitabine/lapatinib
 - Long-term response and side effects seen with T-DM1/pertuzumab on a clinical trial
- Similarities and differences in the mechanisms of action of trastuzumab and pertuzumab
- Recent FDA approval of pertuzumab in combination with docetaxel and trastuzumab for patients with HER2-positive metastatic disease
- Initial results from the Phase III EMILIA trial evaluating T-DM1 versus capecitabine/lapatinib in patients with HER2-positive locally advanced or metastatic breast cancer previously treated with trastuzumab and a taxane
- Cost and reimbursement considerations with the use of dual anti-HER2 therapies

SELECT PUBLICATIONS

A multicenter, multinational Phase II study to assess the clinical safety and feasibility of T-DM1 sequentially with anthracycline-based chemotherapy, as adjuvant or neoadjuvant therapy for patients with early stage HER2-positive breast cancer. NCT01196052

A study of pertuzumab in addition to chemotherapy and Herceptin (trastuzumab) as adjuvant therapy in patients with HER2-positive primary breast cancer. NCT01358877

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; CLEOPATRA Study Group. **Pertuzumab plus trastuzumab plus docetaxel for metastatic breast cancer. *N Engl J Med* 2012;366(2):109-19. Abstract**

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

Bayraktar S et al. **Efficacy of neoadjuvant therapy with trastuzumab concurrent with anthracycline- and nonanthracycline-based regimens for HER2-positive breast cancer. *Cancer* 2012;118(9):2385-93. Abstract**

Blackwell KL et al. **Primary results from EMILIA, a phase III study of trastuzumab emtansine (T-DM1) versus capecitabine (X) and lapatinib (L) in HER2-positive locally advanced or metastatic breast cancer (MBC) previously treated with trastuzumab (T) and a taxane. *Proc ASCO* 2012;Abstract LBA1.**

Burstein HJ et al. **Choosing the best trastuzumab-based adjuvant chemotherapy regimen: Should we abandon anthracyclines? *J Clin Oncol* 2012;30(18):2179-82. Abstract**

CALGB-40601: Paclitaxel and trastuzumab with or without lapatinib in treating patients with Stage II or Stage III breast cancer that can be removed by surgery. NCT00770809

Connolly RM, Bardia A. **Trastuzumab for small HER-2+ breast cancer: Small tumor, big decision. *Oncologist* 2012;17(4):508-11. Abstract**

Curigliano G et al. **Clinical relevance of HER2 overexpression/amplification in patients with small tumor size and node-negative breast cancer. *J Clin Oncol* 2009;27(34):5693-9. Abstract**

Davidson A, Gelmon K. **Do anthracyclines still have a role in adjuvant chemotherapy of breast cancer? *Future Oncol* 2011;7(1):37-55. Abstract**

Dual blockage with afatinib and trastuzumab as neoadjuvant treatment for patients with locally advanced or operable breast cancer receiving taxane-anthracycline containing chemotherapy (DAFNE). NCT01594177

Dueñas E et al. **Prospective evaluation of the conversion rate of HER2, ER and PR between primary tumors and corresponding metastases. CONVERTHER/GEICAM 2009-03 study. San Antonio Breast Cancer Symposium 2011;Abstract P2-12-17.**

Hurvitz SA, Kakkar R. **The potential for trastuzumab emtansine in human epidermal growth factor receptor 2 positive metastatic breast cancer: Latest evidence and ongoing studies. *Ther Adv Med Oncol* 2012;4(5):235-45. Abstract**

Moy B, Goss PE. **Lapatinib-associated toxicity and practical management recommendations. *Oncologist* 2007;12(7):756-65. Abstract**

Seah DS et al. **Use and duration of chemotherapy (CT) in patients (pts) with metastatic breast cancer (MBC) according to tumor subtype (TS) and line of therapy (tx). *Proc ASCO* 2012;Abstract 6089.**

Slamon D et al. **Adjuvant trastuzumab in HER2-positive breast cancer. *N Engl J Med* 2011;365(14):1273-83. Abstract**

Verma S et al. **Trastuzumab emtansine for HER2-positive advanced breast cancer. *N Engl J Med* 2012;[Epub ahead of print]. Abstract**