One Year Later:

The Practical Application of Research Advances in the Management of Early and Advanced Breast Cancer

A special audio supplement to a CME conference held during the 2012 San Antonio Breast Cancer Symposium featuring expert comments on the application of emerging research to patient care

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OVERVIEW OF ACTIVITY

Breast cancer remains the most frequently diagnosed cancer in women, with an estimated 226,870 new cases and 39,510 deaths in the United States in 2012. Advances in screening and prevention have resulted in a steady down-stage migration at the time of disease presentation, such that only 5% of women have identifiable distant metastases at primary diagnosis and the number of individuals living with breast cancer has increased substantially, as has the population "at risk" for recurrent disease.

The current clinical management of breast cancer is multidisciplinary and includes surgical resection of local disease with or without radiation therapy and the treatment of systemic disease (micro- or macroscopic) with cytotoxic chemotherapy, endocrine therapy, biologic therapy or combinations of these agents. The indication and utility of these local and systemic therapeutic options are based largely on a number of prognostic and predictive risk factors present within the patient or the tumor at the time of diagnosis. Despite the existence of various evidence- and/or consensus-based guidelines or algorithms that aim to assist oncologists in making treatment decisions, many areas of controversy persist within the academic and community settings. To bridge the gap between research and patient care, this audio program centered on the discussion of actual patients cared for in the community explores the application of emerging research data to the best-practice management of cases of early and advanced breast cancer. The goal of this CME activity is to help medical oncologists formulate up-to-date clinical management strategies.

LEARNING OBJECTIVES

- Appropriately use biomarkers to assess risk and individualize therapeutic decision-making for patients with early breast cancer.
- Implement a long-term clinical plan for the management of early and advanced HER2-positive breast cancer, incorporating existing and emerging targeted treatments.
- Assimilate new clinical trial evidence into the therapeutic algorithm for localized and advanced ER-positive breast cancer.
- Demonstrate knowledge of emerging research to support novel chemotherapeutic and nonchemotherapy-based regimens in the adjuvant and metastatic settings, and integrate these findings into best-practice disease-management strategies.
- Recall the results of pivotal trials introducing effective new breast cancer therapeutics, and identify their current or potential impact on existing treatment algorithms.
- Counsel appropriately selected patients about participation in ongoing breast cancer clinical research.

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FACULTY — **Dr Hudis** had no real or apparent conflicts of interest to disclose. 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: **Dr Blackwell** — Advisory Committee: Eisai Inc, Novartis Pharmaceuticals Corporation; Consulting Agreements: Novartis Pharmaceuticals Corporation, Xcenda; Speakers Bureau: Amgen Inc, Bristol-Myers Squibb Company, Genomic Health Inc, Novartis Pharmaceuticals Corporation.

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SELECT PUBLICATIONS

APHINITY: A randomized multicenter, double-blind, placebo-controlled comparison of chemotherapy plus trastuzumab plus placebo versus chemotherapy plus trastuzumab plus pertuzumab as adjuvant therapy in patients with operable HER2-positive primary breast cancer. NCT01358877

Baselga J et al. **Biomarker analyses in CLEOPATRA: A Phase III, placebo-controlled study of pertuzumab in HER2-positive, first-line metastatic breast cancer (MBC).** San Antonio Breast Cancer Symposium 2012;**Abstract S5-1**.

Davies C et al. **Long-term effects of continuing adjuvant tamoxifen to 10 years versus stopping at 5 years after diagnosis of oestrogen receptor-positive breast cancer: ATLAS, a randomised trial.** *Lancet* 2012;[Epub ahead of print].

Elias AD et al. **MDV3100-08: A phase I open-label, dose-escalation study evaluating the safety, tolerability, and pharmacokinetics of MDV3100 in women with incurable breast cancer.** *Proc ASCO* 2012;**Abstract TPS668**.

Finn RS et al. **Results of a randomized phase 2 study of PD 0332991, a cyclin-dependent kinase (CDK) 4/6 inhibitor, in combination with letrozole vs letrozole alone for first-line treatment of ER+/HER2- advanced breast cancer (BC).** San Antonio Breast Cancer Symposium 2012;**Abstract S1-6**.

Goldhirsch A et al. **HERA TRIAL: 2 years versus 1 year of trastuzumab after adjuvant chemotherapy in women with HER2-positive early breast cancer at 8 years of median follow up.** San Antonio Breast Cancer Symposium 2012;**Abstract S5-2**.

Gucalp A et al. **Targeting the androgen receptor (AR) in women with AR+ ER-/PR- metastatic breast cancer (MBC).** *Proc ASCO* 2012;**Abstract 1006**.

Kaufman PA et al. **A Phase III, open-label, randomized, multicenter study of eribulin mesylate versus capecitabine in patients with locally advanced or metastatic breast cancer previously treated with anthracyclines and taxanes.** San Antonio Breast Cancer Symposium 2012;**Abstract S6-6**.

Miles D et al. **Pertuzumab (P) in combination with trastuzumab (T) and docetaxel (D) in elderly patients with HER2-positive metastatic breast cancer in the CLEOPATRA study.** San Antonio Breast Cancer Symposium 2012;**Abstract P5-18-01**.

Morris PG, McArthur HL. **Trastuzumab and chemotherapy may be appropriate for small, node-negative, HER2-positive breast cancer.** *Oncologist* 2012;17(10):e33.

Pivot X et al. **PHARE trial results of subset analysis comparing 6 to 12 months of trastuzumab in adjuvant early breast cancer.** San Antonio Breast Cancer Symposium 2012;**Abstract S5-3**.

Swain SM et al. **Confirmatory overall survival (OS) analysis of CLEOPATRA: A randomized, double-blind, placebo-controlled Phase III study with pertuzumab (P), trastuzumab (T), and docetaxel (D) in patients (pts) with HER2-positive first-line (1L) metastatic breast cancer (MBC).** San Antonio Breast Cancer Symposium 2012;**Abstract P5-18-26**.

POST-TEST

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QUESTIONS (PLEASE CIRCLE ANSWER):

1. **The Phase III BOLERO-2 trial reported that _____ was significantly improved with the addition of everolimus to exemestane for postmenopausal women with ER-positive advanced breast cancer refractory to letrozole or anastrozole.**
   a. Overall survival
   b. Progression-free survival
   c. Both a and b
   d. Neither a nor b

2. **Which of the following toxicities were associated with the addition of everolimus to exemestane for patients with ER/PR-positive metastatic breast cancer (mBC) refractory to nonsteroidal aromatase inhibitors in the BOLERO-2 trial?**
   a. Stomatitis
   b. Dysgeusia
   c. Pneumonitis
   d. All of the above

3. **A Phase II trial of the novel oral selective inhibitor of cyclin-dependent kinase PD 0332991 in combination with letrozole as first-line therapy for ER-positive, HER2-negative advanced breast cancer reported improvements in _____ for patients receiving the combination versus those receiving letrozole alone.**
   a. Overall survival
   b. Progression-free survival
   c. Both a and b
   d. Neither a nor b

4. **A Translational Breast Cancer Research Consortium study presented at ASCO 2012 evaluating bicalutamide for patients with androgen receptor (AR)-positive, ER/PR-negative breast cancer reported a clinical benefit rate of approximately 20%.**
   a. True
   b. False

5. **Which of the following statements is true about the results of the randomized Phase III ATLAS trial of continuing therapy with adjuvant tamoxifen (TAM) to 10 years versus stopping TAM at 5 years among women with ER-positive early breast cancer?**
   a. Continuing adjuvant TAM to 10 years significantly reduced mortality from breast cancer after year 10
   b. Continuing adjuvant TAM to 10 years increased the incidence of uterine cancer
   c. Both a and b
   d. Neither a nor b

6. **Which of the following is an eligibility criterion for the Phase III SWOG-S1007 (RxPONDER) trial of adjuvant endocrine therapy with or without chemotherapy?**
   a. Node-positive (1 to 3 nodes only)
   b. ER-positive, HER2-negative
   c. Onco*type* DX® Recurrence Score® ≤25
   d. All of the above

7. **The second interim analysis of CLEOPATRA, which evaluated the addition of pertuzumab to trastuzumab and docetaxel as first-line therapy for HER2-positive mBC, demonstrated a statistically significant improvement in overall survival.**
   a. True
   b. False

8. **A Phase III trial evaluating eribulin mesylate versus capecitabine for patients with locally advanced or metastatic breast cancer previously treated with anthracyclines and taxanes _____ demonstrate statistically significant superiority of eribulin over capecitabine.**
   a. Did
   b. Did not

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 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
Updated results from the CLEOPATRA study of pertuzumab in combination with trastuzumab and docetaxel as first-line therapy for HER2-positive mBC: Confirmatory overall survival analysis, biomarker analysis and evaluation of elderly patients	4 3 2 1	4 3 2 1
ATLAS trial: Benefits and risks associated with continuing adjuvant TAM to 10 years versus stopping at 5 years for ER-positive early breast cancer	4 3 2 1	4 3 2 1
Monitoring and management of dermatologic toxicities associated with pertuzumab administration	4 3 2 1	4 3 2 1
Results from a Phase III study of eribulin versus capecitabine in locally advanced or metastatic breast cancer	4 3 2 1	4 3 2 1
Results from a Phase II trial of the novel oral selective inhibitor of cyclin-dependent kinase PD 0332991 in combination with letrozole as first-line therapy for ER-positive, HER2-negative advanced breast cancer	4 3 2 1	4 3 2 1
MARIANNE: A Phase III trial of T-DM1 with or without pertuzumab versus taxane/trastuzumab for HER2-positive mBC	4 3 2 1	4 3 2 1

Was the activity evidence based, fair, balanced and free from commercial bias?

☐ Yes ☐ No If no, please explain: .....

Please identify how you will change your practice as a result of completing this activity (select all that apply).

☐ This activity validated my current practice ☐ Create/revise protocols, policies and/or procedures ☐ Change the management and/or treatment of my patients

☐ Other (please explain): .....

If you intend to implement any changes in your practice, please provide 1 or more examples:

.....

The content of this activity matched my current (or potential) scope of practice.

☐ 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:

- Appropriately use biomarkers to assess risk and individualize therapeutic decision-making for patients with early breast cancer. . . . . 4 3 2 1 N/M N/A
- Implement a long-term clinical plan for the management of early and advanced HER2-positive breast cancer, incorporating existing and emerging targeted treatments. . . . . 4 3 2 1 N/M N/A
- Assimilate new clinical trial evidence into the therapeutic algorithm for localized and advanced ER-positive breast cancer. . . . . 4 3 2 1 N/M N/A

- Demonstrate knowledge of emerging research to support novel chemotherapeutic and nonchemotherapy-based regimens in the adjuvant and metastatic settings, and integrate these findings into best-practice disease-management strategies. . . 4 3 2 1 N/M N/A
- Recall the results of pivotal trials introducing effective new breast cancer therapeutics, and identify their current or potential impact on existing treatment algorithms. . . . . 4 3 2 1 N/M N/A
- Counsel appropriately selected patients about participation in ongoing breast cancer clinical research. . . . . 4 3 2 1 N/M N/A

Would you recommend this activity to a colleague?

☐ Yes ☐ No If no, please explain: . . . . . .

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 2 — 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
Clifford Hudis, MD	4 3 2 1	4 3 2 1
Kimberly L Blackwell, 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:

. . . . . .

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Name: . . . . . Specialty: . . . . . .

Professional Designation:

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Signature: . . . . . Date: . . . . . .

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