Second Opinion

Case-Based Discussion on the Management of Patients with Early and Advanced Breast Cancer



A Special Audio Supplement to a CME Conference Held During the 2011 San Antonio Breast Cancer Symposium Featuring Expert Comments on Key New Data Sets Presented

Faculty Interview George W Sledge Jr, MD Moderator Neil Love, MD Contents
1 Audio CD

CME Sponsored by Research To Practice.

Breast Cancer®

breast Cancer

CME Information: Second Opinion — Case-Based Discussion on the Management of Patients with Early and Advanced Breast Cancer

FACULTY

George W Sledge Jr, MD
Ballve-Lantero Professor of Oncology
Professor of Medicine and Pathology
Co-Director of the IUSCC Breast
Cancer Research Program
Indiana University Simon Cancer Center
Indiana University School of Medicine
Indianapolis, Indiana

MODERATOR

Neil Love, MD Research To Practice Miami, Florida

OVERVIEW OF ACTIVITY

Breast cancer is one of the most rapidly evolving fields in medical oncology. Results from numerous ongoing trials lead to the continual emergence of new therapeutic agents, treatment strategies and diagnostic and prognostic tools. To bridge the gap between research and patient care, this case-based CME activity features expert perspective on the latest research developments presented at the 2011 San Antonio Breast Cancer Symposium and discussion of relevant clinical issues to assist medical

oncologists, hematologists/oncologists and hematology-oncology fellows in the formulation of up-to-date clinical management strategies.

LEARNING OBJECTIVES

- Integrate validated genomic assays into the clinical management of estrogen receptor (ER)-positive, node-negative and node-positive early breast cancer.
- Assimilate new clinical trial evidence into the therapeutic algorithm for advanced ER-positive breast cancer.
- Appraise the role of bone-directed systemic treatment in the management of breast cancer.
- Demonstrate knowledge of emerging research to support alternative or novel chemotherapeutic regimens in the adjuvant and metastatic settings, and integrate these findings into best-practice disease management strategies.
- Apply the results of emerging research to effectively integrate HER2-directed treatments into the systemic management of advanced HER2-positive breast cancer.
- Recognize the rationale for ongoing investigation of angiogenesis inhibitors in the adjuvant setting.

CME Information (continued)

 Recall the results of pivotal trials introducing effective new breast cancer therapeutics, and identify their impact on existing treatment algorithms.

ACCREDITATION STATEMENT

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

CREDIT DESIGNATION STATEMENT

Research To Practice designates this enduring material for a maximum of 1.25 $AMA\ PRA\ Category\ 1\ Credits^TM$. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

HOW TO USE THIS CME ACTIVITY

This CME activity contains an audio component. To receive credit, the participant should review the CME information, listen to the CD, complete the Post-test with a score of 70% or better and fill out the Educational Assessment and Credit Form located in the back of this booklet or on our website at ResearchToPractice.com/SABCSAudio12/CME.

CONTENT VALIDATION AND DISCLOSURES

Research To Practice (RTP) is committed to providing its participants with high-quality, unbiased and state-of-the-art education. We assess potential conflicts of interest with faculty, planners and managers of CME activities. Real or apparent conflicts of interest are identified and resolved through a conflict of interest resolution process. In addition, all activity content is reviewed by both a member of the RTP scientific staff and an external, independent physician reviewer for fair balance, scientific objectivity of studies referenced and patient care recommendations.

FACULTY — **Dr Sledge** had no real or apparent conflicts of interest to disclose.

MODERATOR — Dr Love is president and CEO of Research To Practice, which receives funds in the form of educational grants to develop CME activities from the following commercial interests: Abbott Laboratories, Allos Therapeutics, Amgen Inc, ArQule Inc, Astellas, Bayer HealthCare Pharmaceuticals/Onyx Pharmaceuticals Inc, Biodesix Inc, Biogen Idec, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Celgene Corporation, Cephalon Inc, Daiichi Sankyo

CME Information (continued)

Inc, Dendreon Corporation, Eisai Inc, EMD Serono Inc, Genentech BioOncology, Genomic Health Inc, ImClone Systems, a wholly owned subsidiary of Eli Lilly and Company, Incyte Corporation, Lilly USA LLC, Medivation Inc, Millennium: The Takeda Oncology Company, Mundipharma International Limited, Novartis

Pharmaceuticals Corporation, Regeneron Pharmaceuticals, Sanofi, Seattle Genetics, Spectrum Pharmaceuticals Inc and Teva.

RESEARCH TO PRACTICE STAFF AND EXTERNAL REVIEWERS — The scientific staff and reviewers for Research To Practice have no real or apparent conflicts of interest to disclose.

This educational activity contains discussion of published and/or investigational uses of agents that are not indicated by the Food and Drug Administration. Research To Practice does not recommend the use of any agent outside of the labeled indications. Please refer to the official prescribing information for each product for discussion of approved indications, contraindications and warnings. The opinions expressed are those of the presenters and are not to be construed as those of the publisher or grantors.

Second Opinion: Virtual Symposium Presentation



Watch the recorded proceedings from this unique live event featuring clinical investigators Drs Eric P Winer, Julie R Gralow, George W Sledge Jr, Hope S Rugo and Ian E Smith addressing a number of actual breast cancer cases presented via video by the treating community-based oncologists. Visit www.ResearchToPractice.com/SABCS12 for more information.

SELECT PUBLICATIONS

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

Baselga J et al. Lapatinib with trastuzumab for HER2-positive early breast cancer (NeoALTTO): A randomized, open-label, multicentre, phase 3 trial. *Lancet* 2012;379(9816):633-40.

Baselga J et al. Pertuzumab plus trastuzumab plus docetaxel for metastatic breast cancer. $N Engl\ J\ Med\ 2012;366(2):109-19.$

Gianni L et al. First results of AVEREL, a randomized phase III trial to evaluate bevacizumab (BEV) in combination with trastuzumab (H) + docetaxel (DOC) as first-line therapy for HER2-positive locally recurrent/metastatic breast cancer (LR/mBC). San Antonio Breast Cancer Symposium 2011; Abstract S4-8.

Gnant M et al. Adjuvant endocrine therapy plus zoledronic acid in premenopausal women with early-stage breast cancer; 62-month follow-up from the ABCSG-12 randomised trial. Lancet Oncol 2011;12(7):631-41.

Kaji D et al. Adjuvant trastuzumab in HER2-positive breast cancer. N Engl J Med 2012;366(7):663.

Mehta RS et al. A phase III randomized trial of anastrozole versus anastrozole and fulvestrant as first-line therapy for postmenopausal women with metastatic breast cancer: SWOG S0226. San Antonio Breast Cancer Symposium 2011; Abstract S1-1.

Powles T et al. Randomized, placebo-controlled trial of clodronate in patients with primary operable breast cancer. J Clin Oncol 2002;20(15):3219-24.

Solin LJ et al. A quantitative multigene RT-PCR assay for predicting recurrence risk after surgical excision alone without irradiation for ductal carcinoma in situ (DCIS): A prospective validation study of the DCIS Score from ECOG E5194. San Antonio Breast Cancer Symposium 2011; Abstract S4-6.

Tsang RY, Finn RS. **Beyond trastuzumab: Novel therapeutic strategies in HER2-positive metastatic breast cancer.** *Br J Cancer* 2012;106(1):6-13.

Van Cutsem E et al. Lessons from the adjuvant bevacizumab trial on colon cancer: What next? J Clin Oncol 2011;29(1):1-4.

Post-test: Second Opinion — Case-Based Discussion on the Management of Patients with Early and Advanced Breast Cancer

1. In the Phase III CLEOPATRA study the	4. Which of the following is an antibody-
addition of pertuzumab to trastuzumab/	drug conjugate under investigation
docetaxel as first-line therapy for	for the treatment of HER2-positive
HER2-positive metastatic breast cancer	metastatic breast cancer?
resulted in	a. Neratinib
a Significant improvement in	b. Doortooloock on detin

- Significant improvement in progression-free survival (PFS)
- b. A trend toward improvement in overall survival (OS)
- c. No improvement in PFS or OS
- d. Both a and b
- 2. The majority of patients in the CLEOPATRA study had not previously received trastuzumab.
 - a. True
 - b. False
- 3. The mechanism of action of pertuzumab is different from but complementary to that of trastuzumab in that it interferes with the dimerization of HER2 with
 - a. HER1
 - b. HER3
 - c. HER4

- b. Brentuximab vedotin
- c. Lapatinib
- d. T-DM1
- In the follow-up study of the ABCSG-12 trial, adjuvant zoledronic acid resulted in a modest improvement in overall survival among premenopausal women who had undergone ovarian suppression.
 - a. True
 - b. False
- In the ECOG-E5194 study of patients with DCIS who were treated with lumpectomy alone, the Oncotype DX[®] DCIS Score[™] identified patients with a
 - a. High risk of developing distant metastases
 - b. Low long-term risk of developing invasive breast cancer
 - c. Neither a nor b

Post-test (continued)

- 7. In a randomized, Phase II study the addition of the HDAC inhibitor entinostat to exemestane in postmenopausal patients with ER-positive metastatic breast cancer whose disease progressed on a nonsteroidal aromatase inhibitor resulted in
 - a. No improvement in PFS
 - b. A significant improvement in PFS
 - c. An improvement in OS
 - d. Both b and c
- 8. The Phase III SWOG-S0226 study of anastrozole with or without fulvestrant demonstrated a clinical advantage with the combination therapy over anastrozole alone as first-line therapy for postmenopausal patients with ER-positive metastatic breast cancer.
 - a. True
 - b. False

- 9. The addition of everolimus to exemestane in postmenopausal patients with ER-positive metastatic breast cancer whose disease progressed on first-line therapy with a nonsteroidal aromatase inhibitor resulted in a significant prolongation in PFS in the Phase III BOLERO-2 study.
 - a. True
 - b. False
- 10. In the BOLERO-2 study, one of the most frequently observed toxicities in patients who received everolimus was
 - a. Pneumonitis
 - b. Headache
 - c. Mucositis

Educational Assessment and Credit Form: Second Opinion — Case-Based Discussion on the Management of Patients with Early and Advanced Breast Cancer

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
Impact of tumor size and anatomy on clinical utility and/or accuracy of the Oncotype DX assay			4321	4321
Results of a prospective validation study of the Onco <i>type</i> DX DCIS Score			4321	4321
Emerging research strategies in the management of HER2-positive disease (eg, neratinib, T-DM1, pertuzumab)			4321	4321
CLEOPATRA: Docetaxel, trastuzumab and pertuzumab as first-line therapy for HER2-positive metastatic breast cancer			4321	4321
Evidence for an antitumor effect of adjuvant bisphosphonates — NSABP-B-34, AZURE and ABCSG-12			4321	4321
BOLERO-2 study: Evero postmenopausal womer cancer refractory to letro	with advanced, EF	R-positive breast	4321	4321

Educational Assessment and Credit Form (continued)
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:
Integrate validated genomic assays into the clinical management of estrogen receptor (ER)-positive, node-negative and node-positive early breast cancer
Assimilate new clinical trial evidence into the therapeutic algorithm for advanced ER-positive breast cancer
Appraise the role of bone-directed systemic treatment in the management of breast cancer

Educational Assessment and Credit Form (continued)
Demonstrate knowledge of emerging research to support alternative or novel chemotherapeutic regimens in the adjuvant and metastatic settings, and integrate these findings into best-practice disease management strategies
 Apply the results of emerging research to effectively integrate HER2-directed treatments into the systemic management of advanced HER2-positive breast cancer
 Recognize the rationale for ongoing investigation of angiogenesis inhibitors in the adjuvant setting
• Recall the results of pivotal trials introducing effective new breast cancer therapeutics, and identify their impact on existing treatment algorithms
Please describe any clinical situations that you find difficult to manage or resolve that you would like to see addressed in future educational activities:
Would you recommend this activity to a colleague? ☐ Yes ☐ No ☐ If no, please explain:
Additional comments about this activity:
As part of our ongoing, continuous quality-improvement effort, we conduct postactivit follow-up surveys to assess the impact of our educational interventions on professional practice. Please indicate your willingness to participate in such a survey.

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

Yes, I am willing to participate in a follow-up survey.

Educational Assessment and Credit Form (continued)

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

4 = Excellent	3 = Good $2 = Adequate$	1 = Suboptimal		
Faculty	Knowledge of subject matter	Effectiveness as an educator		
George W Sledge Jr, MD	4 3 2 1	4 3 2 1		
Moderator	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 moderator for this activity:					
REQUEST FOR CREDIT — Please p					
Name:		Specialty: .			
Professional Designation: MD DO PharmD	NP RN	PA Other:			
Street Address:					
Box/Suite:					
City, State, Zip:					
Telephone:	Fax:				
Email:					

200 010

Educational Assessment and Credit Form (continued)

I cartify my actual time spent to complete this adjustional activity to be

Signature:

Research To Practice designates this enduring material for a maximum of 1.25 AMA PRA Category 1 CreditsTM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

i certify	illy actual	time spent	to complete	uns cuucau	mai activity to	0 DE	_ 11001 (5).

The expiration date for this activity is April 2013. To obtain a certificate of completion and receive credit for this activity, please complete the Post-test, fill out the Educational Assessment and Credit Form and fax both to (800) 447-4310, or mail both to Research To Practice, One Biscayne Tower, 2 South Biscayne Boulevard, Suite 3600, Miami, FL 33131. You may also complete the Post-test and Educational Assessment online at www.ResearchToPractice.com/SABCSAudio12/CME.

Copyright © 2012 Research To Practice. All rights reserved.

The compact disc, Internet content and accompanying printed material are protected by copyright. No part of this program may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or utilizing any information storage and retrieval system, without written permission from the copyright owner.

The opinions expressed are those of the presenters and are not to be construed as those of the publisher or grantors.

Participants have an implied responsibility to use the newly acquired information to

enhance patient outcomes and their own professional development. The information presented in this activity is not meant to serve as a guideline for patient management.

haus(a)

Date:

Any procedures, medications or other courses of diagnosis or treatment discussed or suggested in this activity should not be used by clinicians without evaluation of their patients' conditions and possible contraindications or dangers in use, review of any applicable manufacturer's product information and comparison with recommendations of other authorities.

Copyright © 2012 Research To Practice.

This activity is supported by educational grants from Celgene Corporation, Genentech BioOncology, Genomic Health Inc and Novartis Pharmaceuticals Corporation.

Research To Practice®

Sponsored by Research To Practice.

Last review date: April 2012 Release date: April 2012 Expiration date: April 2013 Estimated time to complete: 1.25 hours