Cases from the Community

Clinical Investigators Provide Their Perspectives on Actual Breast Cancer Cases and the Implications of Emerging Research

A Special Video Supplement

CME Information

TARGET AUDIENCE

This activity is intended for medical oncologists, breast cancer surgeons, radiation oncologists and other healthcare professionals involved in the diagnosis and treatment of breast cancer (BC).

OVERVIEW OF ACTIVITY

BC remains the most frequently diagnosed cancer in women, with an estimated 268.670 new cases and 41.400 deaths in the United States in 2018. The current clinical management of BC is multidisciplinary and includes surgical resection of local disease with or without radiation therapy and the treatment of micro- or macroscopic systemic disease with cytotoxic chemotherapy, endocrine therapy, biologic therapy or combinations of these agents. The indications for and utility of these options are based largely on prognostic and predictive risk factors in the patient or the tumor at the time of diagnosis. Despite various evidence- and/or consensusbased guidelines and algorithms that aim to assist oncologists in making treatment decisions, many areas of controversy persist within the academic and community settings. These 2 faculty interviews recorded after the 40th annual San Antonio Breast Cancer Symposium explore the most significant therapeutic advances of the previous year by using the perspectives of leading BC experts on challenging cases and questions submitted by clinicians in the community to frame discussion of how those advances have aided in the refinement of routine clinical practice and ongoing research. This CME activity will help medical oncologists find answers to the individualized questions and concerns that they frequently encounter and so provide high-quality cancer care.

LEARNING OBJECTIVES

- Consider published data to guide the use of biomarkers and genomic classifiers to assess risk and customize therapy for patients with hormone receptor-positive BC in the neoadjuvant, adjuvant and extended-adjuvant settings.
- Appraise available and emerging research evidence to individualize the selection and duration of neoadjuvant and adjuvant chemobiologic regimens for patients with HER2-overexpressing early BC.

- Implement a long-term clinical plan for the management of metastatic HER2-positive BC, incorporating existing and investigational targeted treatments.
- Develop an evidence-based algorithm for the treatment of advanced hormone receptor-positive pre- and postmeno-pausal BC, including the use of endocrine, biologic and chemotherapeutic agents.
- Consider published research findings and patient preferences in the selection and sequencing of available therapeutic agents for patients with metastatic triplenegative BC.

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 2 AMA PRA Category 1 Credits[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

AMERICAN BOARD OF INTERNAL MEDICINE (ABIM) — MAINTENANCE OF CERTIFICATION (MOC)

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 2 Medical Knowledge MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

Please note, this program has been specifically designed for the following ABIM specialty: **medical oncology**.

Personal information and data sharing: Research To Practice aggregates deidentified user data for program-use analysis, program development, activity planning and site improvement. We may provide aggregate and deidentified data to third parties, including commercial supporters. We do not share or sell personally identifiable information to any unaffiliated third parties or commercial supporters. Please see our privacy policy at **ResearchToPractice.com/Privacy-Policy** for more information.

HOW TO USE THIS CME ACTIVITY

This CME activity consists of a video component. To receive credit, the participant should review the CME information, watch the video, complete the Post-test with a score of 80% or better and fill out the Educational Assessment and Credit Form located at **ResearchToPractice.com/SanAntonioBC17/ Interviews/Video/CME**. The corresponding audio program is available as an alternative at **ResearchToPractice.com/SanAntonioBC17/Interviews**.

CONTENT VALIDATION AND DISCLOSURES

Research To Practice (RTP) is committed to providing its participants with high-quality, unbiased and state-of-theart education. We assess conflicts of interest with faculty, planners and managers of CME activities. 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 — The following faculty (and their spouses/partners) reported relevant conflicts of interest, which have been resolved through a conflict of interest resolution process:

Kimberly L Blackwell, MD

Professor of Medicine Director, Breast Cancer Program Duke Cancer Institute Durham, North Carolina

Advisory Committee: Advaxis Inc, Bayer HealthCare Pharmaceuticals, Eisai Inc, MacroGenics Inc, Merck, Novartis, Pfizer Inc, Pierian Biosciences, Syndax Pharmaceuticals Inc; Consulting Agreements: Celgene Corporation, Coherus BioSciences, G1 Therapeutics, Genentech BioOncology, Lilly, Novartis, Pfizer Inc, Puma Biotechnology Inc, Roche Laboratories Inc, Sandoz; Contracted Research: Celgene Corporation, Genentech BioOncology, Novartis, Pfizer Inc.

Joyce O'Shaughnessy, MD

Chair, Breast Cancer Research Program Baylor Charles A Sammons Cancer Center Celebrating Women Chair in Breast Cancer Research Texas Oncology US Oncology Dallas, Texas

Advisory Committee and Consulting Agreements: Amgen Inc, AstraZeneca Pharmaceuticals LP, Celgene Corporation, Eisai Inc, Genentech BioOncology, Lilly, Merck, Novartis, Pfizer Inc, Roche Laboratories Inc, Sanofi Genzyme, Takeda Oncology; Contracted Research: Merck.

EDITOR — **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: AbbVie Inc, Acerta Pharma, Adaptive Biotechnologies, Agendia Inc, Agios Pharmaceuticals Inc, Amgen Inc, Ariad Pharmaceuticals Inc, Array BioPharma Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Baxalta Inc, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheranostics Inc, Boehringer Ingelheim Pharmaceuticals Inc., Boston Biomedical Pharma Inc., Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, CTI BioPharma Corp, Dendreon Pharmaceuticals Inc, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech BioOncology, Genomic Health Inc., Gilead Sciences Inc. Halozyme Inc, ImmunoGen Inc, Incyte Corporation, Infinity Pharmaceuticals Inc, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Kite Pharma Inc, Lexicon Pharmaceuticals Inc, Lilly, Medivation Inc, a Pfizer Company, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, NanoString Technologies, Natera Inc, Novartis, Novocure, Onyx Pharmaceuticals, an Amgen subsidiary, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sanofi Genzyme, Seattle Genetics, Sigma-Tau Pharmaceuticals Inc, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro Inc, Teva Oncology and Tokai Pharmaceuticals Inc.

RESEARCH TO PRACTICE STAFF AND EXTERNAL

REVIEWERS — The scientific staff and reviewers for Research To Practice have no relevant 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.

This activity is supported by educational grants from Agendia Inc, AstraZeneca Pharmaceuticals LP, Genentech BioOncology, Genomic Health Inc, Lilly, Novartis and Puma Biotechnology Inc.

Hardware/Software Requirements:

A high-speed Internet connection A monitor set to 1280 x 1024 pixels or more Internet Explorer 11 or later, Firefox 56 or later, Chrome 61 or later, Safari 11 or later, Opera 48 or later Adobe Flash Player 27 plug-in or later Adobe Acrobat Reader (Optional) Sound card and speakers for audio

Release date: April 2018

Expiration date: April 2019

Select Publications

A randomized, double-blind, parallel group, placebo-controlled multi-centre phase III study to assess the efficacy and safety of olaparib versus placebo as adjuvant treatment in patients with gBRCA1/2 mutations and high risk HER2 negative primary breast cancer who have completed definitive local treatment and neoadjuvant or adjuvant chemotherapy. NCT02032823

Albain KS et al. Prognostic and predictive value of the 21-gene recurrence score assay in postmenopausal women with nodepositive, oestrogen-receptor-positive breast cancer on chemotherapy: A retrospective analysis of a randomised trial. *Lancet Oncol* 2010;11(1):55-65.

Barroso-Sousa R et al. Clinical development of the CDK4/6 inhibitors ribociclib and abemaciclib in breast cancer. Breast Care (Basel) 2016;11(3):167-73.

Bartlett JM et al; OPTIMA TMG. Comparing breast cancer multiparameter tests in the OPTIMA prelim trial: No test is more equal than the others. *J Natl Cancer Inst* 2016;108(9).

Finn RS et al. Palbociclib and letrozole in advanced breast cancer. N Engl J Med 2016;375(20):1925-36.

Finn RS et al. The cyclin-dependent kinase 4/6 inhibitor palbociclib in combination with letrozole versus letrozole alone as first-line treatment of oestrogen receptor-positive, HER2-negative, advanced breast cancer (PALOMA-1/TRIO-18): A randomised phase 2 study. *Lancet Oncol* 2015;16(1):25-35.

Goetz MP et al. MONARCH 3: Abemaciclib as initial therapy for advanced breast cancer. J Clin Oncol 2017;35(32):3638-46.

Goss PE et al. Exemestane versus anastrozole in postmenopausal women with early breast cancer: NCIC CTG MA.27 — A randomized controlled phase III trial. *J Clin Oncol* 2013;31(11):1398-404.

Hortobagyi GN et al. **Ribociclib as first-line therapy for HR-positive, advanced breast cancer.** *N Engl J Med* 2016;375(18):1738-48.

Jimenez MM et al. Neratinib after trastuzumab (T)-based adjuvant therapy in early-stage HER2+ breast cancer (BC): 5 year analysis of the phase III ExteNET trial. *Proc ESMO* 2017; Abstract 1490.

Leung SCY et al. Analytical validation of a standardized scoring protocol for Ki67: Phase 3 of an international multicenter collaboration. *NPJ Breast Cancer* 2016;2:16014.

Masuda N et al. Adjuvant capecitabine for breast cancer after preoperative chemotherapy. *N Engl J Med* 2017;376(22):2147-59.

Pagani O et al. Randomized comparison of adjuvant aromatase inhibitor exemestane (E) plus ovarian function suppression (OFS) vs tamoxifen (T) plus OFS in premenopausal women with hormone receptor positive (HR+) early breast cancer (BC): Update of the combined TEXT and SOFT trials. San Antonio Breast Cancer Symposium 2017;Abstract GS4-02.

Rimawi MF et al. A phase III trial evaluating pCR rates with HR+, HER2-positive breast cancer treated with neoadjuvant docetaxel, carboplatin, trastuzumab, and pertuzumab with or without estrogen deprivation: NRG Oncology/NSABP B-52. San Antonio Breast Cancer Symposium 2016;Abstract S3-06.

Robertson JFR et al. Peri-operative aromatase inhibitor treatment in determining or predicting longterm outcome in early breast cancer — The POETIC trial (CRUK/07/015). San Antonio Breast Cancer Symposium 2017; Abstract GS1-03.

Sestak | et al. Prediction of late distant recurrence after 5 years of endocrine treatment: A combined analysis of patients from the Austrian Breast and Colorectal Cancer Study Group 8 and Arimidex, Tamoxifen Alone or in Combination randomized trials using the PAM50 risk of recurrence score. *J Clin Oncol* 2015;33(8):916-22.

Sledge GW et al. MONARCH 2: Abemaciclib in combination with fulvestrant in women with HR+/HER2- advanced breast cancer who had progressed while receiving endocrine therapy. *J Clin Oncol* 2017;35(25):2875-84.

Sparano JA et al. Prospective validation of a 21-gene expression assay in breast cancer. N Engl J Med 2015;373(21):2005-14.

Straver ME et al. **The 70-gene signature as a response predictor for neoadjuvant chemotherapy in breast cancer.** *Breast Cancer Res Treat* 2010;119(3):551-8.

Swain SM et al. Pertuzumab, trastuzumab, and docetaxel in HER2-positive metastatic breast cancer. *N Engl J Med* 2015;372(8):724-34.

Von Minckwitz G et al. Adjuvant pertuzumab and trastuzumab in early HER2-positive breast cancer. N Engl J Med 2017;377(2):122-31.