Breast Cancer Update

Issue 1, 2017 (Video Program)

CME Information

TARGET AUDIENCE

This activity is intended for medical oncologists, hematologist-oncologists and other healthcare providers involved in the treatment of breast cancer.

OVERVIEW OF ACTIVITY

Breast cancer continues to be 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. In order to offer optimal patient care — including the option of clinical trial participation — the practicing cancer clinician must be well informed of these advances. Featuring information on the latest research developments along with expert perspectives, this CME activity is designed to assist medical oncologists, hematologist-oncologists and hematology-oncology fellows with the formulation of up-to-date clinical management strategies.

LEARNING OBJECTIVES

- Implement a clinical plan for the management of metastatic HER2-positive breast cancer, incorporating existing and emerging targeted treatments.
- Develop an understanding of the efficacy data and toxicity profiles of PARP inhibitors for patients with HER2-negative and BRCA-mutated advanced breast cancer.
- Develop an evidence-based algorithm for the treatment of hormone-sensitive advanced breast cancer, including the use of endocrine, biologic and chemotherapeutic agents.
- Consider the use of available biomarkers and genomic assays to assess risk and individualize therapy for patients with breast cancer in the neoadjuvant and adjuvant settings.
- Recall the results of pivotal trials introducing effective new breast cancer therapeutic agents, and identify their potential effect on existing treatment algorithms.
- Counsel appropriately selected patients with breast cancer about participation in ongoing clinical trials.

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 2.25 *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 2.25 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/BCU117/Video/CME**. The corresponding audio program is available as an alternative at **ResearchToPractice.com/BCU117**.

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 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:

Mark Robson, MD
Clinic Director, Clinical Genetics Service
Associate Attending Physician
Clinical Genetics and Breast Cancer Medicine
Associate Member
Memorial Sloan Kettering Cancer Center
Associate Professor of Medicine
Weill Cornell Medical College of Cornell University
New York, New York

Advisory Committee, Consulting Agreement and Contracted Research: AstraZeneca Pharmaceuticals LP.

Ian E Krop, MD, PhD
Director of Clinical Research
Breast Oncology Center
Dana-Farber Cancer Institute
Assistant Professor of Medicine
Harvard Medical School
Boston, Massachusetts

Advisory Committee: Genentech BioOncology, Roche Laboratories Inc, Seattle Genetics; **Contracted Research:** Roche Laboratories Inc.

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: 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 Astellas Pharma Global Development Inc/Medivation Inc, a Pfizer Company, AstraZeneca Pharmaceuticals LP, Eisai Inc, Genentech BioOncology, Genomic Health Inc, Lilly and Novartis.

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
Adobe Acrobat Reader
(Optional) Sound card and speakers for audio

Last review date: November 2017

Expiration date: November 2018

Select Publications

Aebi S et al. **Chemotherapy for isolated locoregional recurrence of breast cancer (CALOR): A randomised trial.** *Lancet Oncol* 2014;15(2):156-63.

ALTernate approaches for clinical stage II or III Estrogen Receptor positive breast cancer NeoAdjuvant TrEatment (ALTERNATE) in postmenopausal women: A phase III study (A011106). NCT01953588

Blum JL et al. **Anthracyclines in early breast cancer: The ABC trials — USOR 06-090, NSABP B-46-I/USOR 07132, and NSABP B-49 (NRG Oncology).** *J Clin Oncol* 2017;35(23):2647-55.

Burke KA et al. **The landscape of somatic genetic alterations in BRCA1 and BRCA2 breast cancers.** San Antonio Breast Cancer Symposium 2016;**Abstract S2-02**.

Cardoso F et al. **70-gene signature as an aid to treatment decisions in early-stage breast cancer.** *N Engl J Med* 2016;375(8):717-29.

Chan A et al. **Neratinib after trastuzumab-based adjuvant therapy in patients with HER2-positive breast cancer (ExteNET): A multicentre, randomised, double-blind, placebo-controlled, phase 3 trial.** *Lancet Oncol* 2016;17(3):367-77.

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

Gluz O et al. **West German Study Group phase III PlanB trial: First prospective outcome data for the 21-gene Recurrence Score assay and concordance of prognostic markers by central and local pathology assessment.** *J Clin Oncol* 2016;34(20):2341-9.

King TA et al. **A prospective analysis of surgery and survival in stage IV breast cancer (TBCRC 013).** *Proc ASCO* 2016; **Abstract 1006**.

Krop I et al. **Use of biomarkers to guide decisions on adjuvant systemic therapy for women with early-stage invasive breast cancer: American Society of Clinical Oncology clinical practice guideline focused update.** *J Clin Oncol* 2017;[Epub ahead of print].

Krop I et al. **A single-arm phase 2 study to assess clinical activity, efficacy and safety of enzalutamide with trastuzumab in HER2+ AR+ metastatic or locally advanced breast cancer.** San Antonio Breast Cancer Symposium 2016;**Abstract P4-22-08**.

Kuang Y et al. **The emergence of ESR1 mutations is associated with aromatase inhibitor and fulvestrant therapy.** *Proc AACR* 2017;**Abstract 4950**.

Love N et al. **HER2 and estrogen receptor status drive decisions regarding the use of neoadjuvant chemotherapy.** San Antonio Breast Cancer Symposium 2015;**Abstract P1-14-20**.

PALbociclib coLlaborative Adjuvant Study: A randomized phase III trial of palbociclib with standard adjuvant endocrine therapy versus standard adjuvant endocrine therapy alone for hormone receptor positive (HR+)/human epidermal growth factor receptor 2 (HER2)-negative early breast cancer (PALLAS). NCT02513394

Robson M et al. **Olaparib for metastatic breast cancer in patients with a germline BRCA mutation.** *N Engl J Med* 2017;[Epub ahead of print].

Robson ME at al. **OlympiAD: Phase III trial of olaparib monotherapy versus chemotherapy for patients (pts) with HER2-negative metastatic breast cancer (mBC) and a germline BRCA mutation (gBRCAm).** *Proc ASCO* 2017;**Abstract LBA4**.

Shak S et al. **Breast cancer specific survival in 38,568 patients with node negative hormone receptor positive invasive breast cancer and Onco*type* DX Recurrence Score results in the SEER database.** San Antonio Breast Cancer Symposium 2015;**Abstract P5-15-01**.

Sparano JA et al. **Prospective trial of endocrine therapy alone in patients with estrogen receptor positive, HER2-negative, node-negative breast cancer: Results of the TAILORx low risk registry.** San Antonio Breast Cancer Symposium 2015;**Abstract P2-08-01**.

Spoerke JM et al. **Heterogeneity and clinical significance of ESR1 mutations in ER-positive metastatic breast cancer patients receiving fulvestrant.** *Nat Commun* 2016;7:11579.

Tolaney S et al. **Seven-year (yr) follow-up of adjuvant paclitaxel (T) and trastuzumab (H) (APT trial) for node-negative, HER2-positive breast cancer (BC).** *Proc ASCO* 2017;**Abstract 511**.

Von Minckwitz G et al. **APHINITY trial (BIG 4-11): A randomized comparison of chemotherapy (C) plus trastuzumab (T) plus placebo (Pla) versus chemotherapy plus trastuzumab (T) plus pertuzumab (P) as adjuvant therapy in patients (pts) with HER2-positive early breast cancer (EBC).** *Proc ASCO* 2017;**Abstract LBA500**.