Breast Cancer Update

Issue 1, 2016 (Video Program)

CME Information

TARGET AUDIENCE

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

OVERVIEW OF ACTIVITY

BC remains the most frequently diagnosed cancer in women, and in 2016 in the United States alone the disease will culminate in an estimated 246,660 new cases and 40,890 deaths. The current clinical management of BC is multidisciplinary and includes surgical resection of local disease with or without radiation therapy and the treatment of systemic disease with cytotoxic chemotherapy, endocrine therapy, biologic therapy or combinations of these approaches. The indication and/or utility of these local and systemic treatment options is largely based on a number of prognostic and predictive risk factors present within the patient or her tumor at the time of diagnosis. In fact, as the field of oncology is challenged to improve the precision with which it therapeutically targets malignant cells, biomarker-driven treatment algorithms have become the "norm" for many tumor types, particularly BC. Although the diagnosis and treatment of BC remain, in many ways, more advanced than in other solid cancers, challenging issues in the basic management of this disease continue to require refinement.

Several consensus- and evidence-based treatment guidelines are available and aim to assist clinicians with making BC management decisions in the face of this dynamic clinical and research environment, but despite the existence of these tools many areas of controversy persist within academic and community settings. To provide clinicians with therapeutic strategies to address the disparate needs of patients with BC, this program features information on the latest research developments and is designed to assist medical oncologists, hematologists-oncologists and other healthcare professionals with the formulation of up-to-date strategies for the care of patients with BC

LEARNING OBJECTIVES

- Establish an evidence-based algorithm for the treatment of hormone-sensitive advanced BC, including the use of endocrine, biologic and chemotherapeutic agents.
- Implement a long-term clinical plan for the management of metastatic HER2-positive BC, incorporating existing, recently approved and investigational targeted treatments.
- Recognize the evolving application of biomarkers and multigene assays in BC management, and effectively use these tools to refine or individualize treatment plans for patients.
- Develop an understanding of the mechanisms of action, available data and potential clinical roles of checkpoint inhibitors and antiandrogens in advanced BC.
- Appraise ongoing trials of PARP inhibitors in BRCA mutation-positive and triple-negative BC.

ACCREDITATION STATEMENT

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

Successful completion of this CME activity enables the participant to earn up to 2 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**.

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HOW TO USE THIS CME ACTIVITY

This CME activity consists of a video component. To receive credit, the participant should 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/BCU116/Video/CME.

CONTENT VALIDATION AND DISCLOSURES

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

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Contracted Research: Eisai Inc, Genentech BioOncology, GlaxoSmithKline, Lilly, MacroGenics Inc, Merck, Novartis Pharmaceuticals Corporation, Pfizer Inc, Plexxikon Inc, Roche Laboratories Inc; **Speakers Bureau:** Genomic Health Inc.

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

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Select Publications

A phase 3, open-label, randomized, parallel, 2-arm, multi-center study of talazoparib (BMN 673) versus physician's choice in germline BRCA mutation subjects with locally advanced and/or metastatic breast cancer, who have received prior chemotherapy regimens for metastatic disease. NCT01945775

A randomized, placebo-controlled, double-blind, phase 3 study evaluating safety and efficacy of the addition of veliparib plus carboplatin versus the addition of carboplatin to standard neoadjuvant chemotherapy versus standard neoadjuvant chemotherapy in subjects with early stage triple negative breast cancer (TNBC). NCT02032277

Adams S et al. **Phase Ib trial of atezolizumab in combination with *nab*-paclitaxel in patients with metastatic triple-negative breast cancer (mTNBC).** *Proc ASCO* 2016;**Abstract 1009**.

Blum JL et al. **Interim joint analysis of the ABC (Anthracyclines in Early Breast Cancer) phase III trials (USOR 06-090, NSABP B-46I/USOR 07132, NSABP B-49 [NRG Oncology]) comparing docetaxel + cyclophosphamide (TC) v anthracycline/taxane-based chemotherapy regimens (TaxAC) in women with high-risk, HER2-negative breast cancer.** *Proc ASCO* 2016;**Abstract 1000**.

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.

Chlebowski RT et al. **Low-fat dietary pattern and breast cancer mortality in the Women's Health Initiative (WHI) randomized trial.** *Proc AACR* 2016;**Abstract CT043**.

Dickler MN et al. **MONARCH1: Results from a phase II study of abemaciclib, a CDK4 and CDK6 inhibitor, as monotherapy, in patients with HR+/HER2- breast cancer, after chemotherapy for advanced disease.** *Proc ASCO* 2016;**Abstract 510**.

Emens LA et al. **IMpassion130: A Phase III randomized trial of atezolizumab with *nab*-paclitaxel for first-line treatment of patients with metastatic triple-negative breast cancer (mTNBC).** *Proc ASCO* 2016;**Abstract TPS1104**.

Finn RS et al. **PALOMA-2: Primary results from a phase III trial of palbociclib (P) with letrozole (L) compared with letrozole alone in postmenopausal women with ER+/HER2- advanced breast cancer (ABC).** *Proc ASCO* 2016;**Abstract 507**.

Fribbens C et al. **Plasma ESR1 mutations and the treatment of estrogen receptor-positive advanced breast cancer.** *J Clin Oncol* 2016;34(25):2961-8.

Goss PE et al. **A randomized trial (MA.17R) of extending adjuvant letrozole for 5 years after completing an initial 5 years of aromatase inhibitor therapy alone or preceded by tamoxifen in postmenopausal women with early-stage breast cancer.** *Proc ASCO* 2016;**Abstract LBA1**.

Huang CS et al. **Randomized phase II/III trial of active immunotherapy with OPT-822/OPT-821 in patients with metastatic breast cancer.** *Proc ASCO* 2016;**Abstract 1003**.

Hurvitz SA et al. **Pathologic complete response (pCR) rates after neoadjuvant trastuzumab emtansine (T-DM1 [K]) + pertuzumab (P) vs docetaxel + carboplatin + trastuzumab + P (TCHP) treatment in patients with HER2-positive (HER2+) early breast cancer (EBC) (KRISTINE).** *Proc ASCO* 2016;**Abstract 500**.

I-SPY 2 trial (Investigation of Serial Studies to Predict Your Therapeutic Response with Imaging and moLecular Analysis 2). NCT01042379

Lee S et al. **A phase III trial of adjuvant capecitabine in breast cancer patients with HER2-negative pathologic residual invasive disease after neoadjuvant chemotherapy (CREATE-X, JBCRG-04).** San Antonio Breast Cancer Symposium 2015;**Abstract S1-07**.

monarcHER: A phase 2, randomized, multicenter, 3-arm, open-label study to compare the efficacy of abemaciclib plus trastuzumab with or without fulvestrant to standard-of-care chemotherapy of physician's choice plus trastuzumab in women with HR+, HER2+ locally advanced or metastatic breast cancer. NCT02675231

Nanda R et al. **Pembrolizumab in patients with advanced triple-negative breast cancer: Phase Ib KEYNOTE-012 study.** *J Clin Oncol* 2016;34(21):2460-7.

Piccart M et al. **Primary analysis of the EORTC 10041/ BIG 3-04 MINDACT study: A prospective, randomized study evaluating the clinical utility of the 70-gene signature (MammaPrint) combined with common clinical-pathological criteria for selection of patients for adjuvant chemotherapy in breast cancer with 0 to 3 positive nodes.** *Proc AACR* 2016;**Abstract CT039**.

Rugo HS et al. **Heritage: A phase III safety and efficacy trial of the proposed trastuzumab biosimilar MyI-1401O versus Herceptin.** *Proc ASCO* 2016;**Abstract LBA503**.

Rugo HS et al. **Prevention of everolimus/exemestane (EVE/EXE) stomatitis in postmenopausal (PM) women with hormone receptor-positive (HR+) metastatic breast cancer (MBC) using a dexamethasone-based mouthwash (MW): Results of the SWISH trial.** *Proc ASCO* 2016;**Abstract 525**.

Rugo HS et al. **Preliminary efficacy and safety of pembrolizumab (MK-3475) in patients with PD-L1–positive, estrogen receptor-positive (ER+)/HER2-negative advanced breast cancer enrolled in KEYNOTE-028.** San Antonio Breast Cancer Symposium 2015;**Abstract S5-07**.

Sahebjam S et al. **Assessment of concentrations of abemaciclib and its major active metabolites in plasma, CSF, and brain tumor tissue in patients with brain metastases secondary to hormone receptor positive (HR+) breast cancer.** *Proc ASCO* 2016;**Abstract 526**.

Slamon D et al. **Ten year follow-up of BCIRG-006 comparing doxorubicin plus cyclophosphamide followed by docetaxel (AC → T) with doxorubicin plus cyclophosphamide followed by docetaxel and trastuzumab (AC → TH) with docetaxel, carboplatin and trastuzumab (TCH) in HER2+ early breast cancer.** San Antonio Breast Cancer Symposium 2015;**Abstract S5-04**.

Toi M et al. **A phase III trial of adjuvant capecitabine in breast cancer patients with HER2-negative pathologic residual invasive disease after neoadjuvant chemotherapy (CREATE-X, JBCRG-04).** San Antonio Breast Cancer Symposium 2015;**Abstract S1-07**.

Turner N et al. **Efficacy of palbociclib plus fulvestrant (P + F) in patients (pts) with metastatic breast cancer (MBC) and *ESR1* mutations (mus) in circulating tumor DNA (ctDNA).** *Proc ASCO* 2016;**Abstract 512**.

Urruticoechea A et al. **PHEREXA: A phase III study of trastuzumab (H) + capecitabine (X) ± pertuzumab (P) for patients (pts) who progressed during/after one line of H-based therapy in the HER2-positive metastatic breast cancer (MBC) setting.** *Proc ASCO* 2016;**Abstract 504**.

Vidula N et al. **Androgen receptor (AR) expression in primary breast cancer (BC): Correlations with clinical characteristics and outcomes.** *Proc ASCO* 2016;**Abstract 1072**.

Winer E et al. **KEYNOTE-119: A randomized phase III study of single-agent pembrolizumab (MK-3475) vs single-agent chemotherapy per physician's choice for metastatic triple-negative breast cancer (mTNBC).** *Proc ASCO* 2016;**Abstract TPS1102**.