WHAT ONCOLOGY CLINICIANS WANT TO KNOW

Addressing Current Questions and Controversies in the Management of Breast Cancer

CME INFORMATION

TARGET AUDIENCE

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

OVERVIEW OF ACTIVITY

Breast cancer remains the most frequently diagnosed cancer in women, and in 2014 in the United States alone the disease culminated in an estimated 232,670 new cases and 40,000 deaths. 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. Consequently, 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 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, biomarkerdriven treatment algorithms have become the "norm" for many tumor types, including breast cancer.

These proceedings from a CME symposium during the 37th annual San Antonio Breast Cancer Symposium explore the most significant therapeutic advances during the previous year by using the perspectives of leading breast cancer experts on challenging cases and questions submitted by clinicians in the community to frame a relevant discussion of how this information has aided in the refinement of current routine clinical practice and ongoing research. This CME activity will help medical oncologists integrate these findings into best-practice disease management strategies.

LEARNING OBJECTIVES

 Appreciate the similarities and differences between existing genomic assays, and use this information to select an appropriate platform or platforms to assess risk and individualize therapy for patients with invasive and noninvasive early breast cancer.

- Develop an evidence-based algorithm for the initial and long-term treatment of localized hormone receptor-positive pre- and postmenopausal breast cancer.
- Individualize the selection of evidence-based neoadjuvant and adjuvant chemobiologic regimens for patients with HER2-overexpressing early breast cancer.
- Implement a long-term clinical plan for the management of metastatic HER2-positive breast cancer, incorporating existing, recently approved and investigational targeted treatments.
- Develop an evidence-based algorithm for the treatment of advanced hormone receptor-positive breast cancer, including the use of endocrine, biologic and chemotherapeutic agents.
- Apply the results of current clinical research to the selection and sequencing of available therapeutics for patients with localized and advanced triple-negative breast cancer.
- Recall emerging research data with next-generation sequencing, and determine the clinical and/or research application for patients with metastatic breast cancer.
- Counsel appropriately selected patients about participation in ongoing breast cancer clinical research.

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FACULTY — 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:

Kimberly L Blackwell, MD

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

Advisory Committee: Amgen Inc, Roche Laboratories Inc; Consulting Agreements: Boehringer Ingelheim Pharmaceuticals Inc, Genentech BioOncology, Novartis Pharmaceuticals Corporation; Contracted Research: Celgene Corporation, Genentech BioOncology; Speakers Bureau: Genomic Health Inc.

Adam M Brufsky, MD, PhD

Professor of Medicine University of Pittsburgh Associate Director for Clinical Investigation University of Pittsburgh Cancer Institute Co-Director, Comprehensive Breast Cancer Center Associate Division Chief University of Pittsburgh Department of Medicine Division of Hematology/Oncology Pittsburgh, Pennsylvania

Consulting Agreements: Celgene Corporation, Eisai Inc, Genentech BioOncology, Genomic Health Inc, Novartis Pharmaceuticals Corporation, Roche Laboratories Inc.

Angelo Di Leo, MD, PhD

Head of Sandro Pitigliani Medical Oncology Unit Department of Oncology Hospital of Prato Istituto Toscano Tumori Prato, Italy

Advisory Committee: AstraZeneca Pharmaceuticals LP, Eisai Inc, Novartis Pharmaceuticals Corporation, Pfizer Inc, Roche Laboratories Inc; Consulting Agreements: AstraZeneca Pharmaceuticals LP, Genentech BioOncology; Speakers Bureau: Genomic Health Inc, Sanofi.

Kathy D Miller, MD

Co-Director, IU Simon Cancer Center Breast Cancer Program Ballvé-Lantero Scholar in Oncology Professor of Medicine, Division of Hematology/Oncology The Indiana University Melvin and Bren Simon Cancer Center Indianapolis, Indiana **Contracted Research:** Astellas Scientific and Medical Affairs Inc, Genentech BioOncology, Roche Laboratories Inc.

Eric P Winer, MD

Thompson Chair in Breast Cancer Research Chief, Division of Women's Cancers Dana-Farber Cancer Institute Professor of Medicine Harvard Medical School Boston, Massachusetts

Contracted Research: Genentech BioOncology.

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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

Kimberly L Blackwell, MD

A Cancer Research UK phase II proof of principle trial of the activity of the PARP-1 inhibitor, AG-014699, in known carriers of a BRCA 1 or BRCA 2 mutation with locally advanced or metastatic breast or advanced ovarian cancer. NCT00664781

A Phase I/II study of CR011-vcMMAE in patients with locally advanced or metastatic breast cancer. NCT00704158

A phase I, open-label study to assess the safety and tolerability of KU-0059436 in combination with carboplatin, KU-0059436 in combination with a paclitaxel/carboplatin T/C doublet and KU-0059436 in combination with paclitaxel in the treatment of patients with advanced solid tumours. NCT00516724

A phase II study of neratinib in metastatic HER2 non-amplified but HER2 mutant breast cancer. NCT01670877

ABRAZO: A Phase 2, 2-stage, 2-cohort study of talazoparib (BMN 673), in locally advanced and/or metastatic breast cancer patients with BRCA mutation (ABRAZO study). NCT02034916

ABT-888 with cyclophosphamide in refractory BRCA-positive ovarian, primary peritoneal or ovarian high-grade serous carcinoma, fallopian tube cancer, triple-negative breast cancer, and low-grade non-Hodgkin's lymphoma. NCT01306032

An open-label, multicenter, phase 1/2 study of poly(ADP-ribose) polymerase (PARP) inhibitor E7449 as single agent in subjects with advanced solid tumors or with B-cell malignancies and in combination with temozolomide (TMZ) or with carboplatin and paclitaxel in subjects with advanced solid tumors. NCT01618136

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Nanda R et al. A phase Ib study of pembrolizumab (MK-3475) in patients with advanced triple-negative breast cancer. *Proc ASCO* 2014; Abstract S1-09.

OlympiAD: Assessment of the efficacy and safety of olaparib monotherapy versus physicians choice chemotherapy in the treatment of metastatic breast cancer patients with germline BRCA1/2 mutations. NCT02000622

PARP inhibition for triple negative breast cancer (ER-/PR-/HER2-) with BRCA1/2 mutations. NCT01074970

Phase I study of the oral PI3kinase inhibitor BKM120 or BYL719 and the oral PARP inhibitor olaparib in patients with recurrent triple negative breast cancer or high grade serous ovarian cancer. NCT01623349

Phase I/II study of cediranib and olaparib in combination for treatment of recurrent papillary-serous ovarian, fallopian tube, or peritoneal cancer or for treatment of recurrent triple-negative breast cancer. NCT01116648

Phase II study of AZD2281 in patients with known BRCA mutation status or recurrent high grade ovarian cancer or patients with known BRCA mutation status/triple negative breast cancer. NCT00679783

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The study evaluating efficacy and tolerability of veliparib in combination with temozolomide or in combination with carboplatin and paclitaxel versus placebo in subjects with BRCA1 and BRCA2 mutation and metastatic breast cancer. NCT01506609

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Adam M Brufsky, MD, PhD

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Eric P Winer, MD

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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

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KAITLIN: A study of Kadcyla (trastuzumab emtansine) plus Perjeta (pertuzumab) following anthracyclines in comparison with Herceptin (trastuzumab) plus Perjeta and a taxane following anthracyclines as adjuvant therapy in patients with operable HER2-positive primary breast cancer. NCT01966471

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