Visiting Professors

Breast Cancer Edition

(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

Individualized treatment decisions for patients with metastatic breast cancer (mBC) are driven by disease and patient characteristics. ER-positive disease, which represents approximately 63% of all cases, is perhaps the most nuanced subtype in regard to therapeutic decision-making in the advanced setting. Unlike other phenotypes, for which systemic therapy almost always includes chemotherapy, for patients with hormonally driven tumors the availability of effective endocrine therapy may initially abrogate and significantly delay the need for cytotoxic intervention. This important distinction has historically added complexity to the care of these patients as clinicians are consistently forced to evaluate the risk-benefit ratios of the many available options and give significant consideration to the preferences of patients when making therapeutic recommendations. While this and several other factors have defined the management of ER-positive mBC, several groundbreaking advances now add even greater challenges to this prevalent clinical situation.

To provide clinicians with therapeutic strategies to address the disparate needs of patients with ER-positive mBC, the *Visiting Professors* series employs an innovative case-based approach that unites the perspectives of leading breast cancer investigators and general oncologists as they explore the intricacies of treatment decisions. Upon completion of this CME activity, medical oncologists should be able to formulate an up-to-date and more complete approach to the care of these patients.

LEARNING OBJECTIVES

- Implement a clinical plan for the management of ER-positive mBC, considering the patient's clinical presentation, prior treatment course and psychosocial status.
- Assess the FDA indications for the commercially available CDK4/6 inhibitors, and discern how these agents can be optimally employed in the management of ER-positive mBC.
- Educate patients regarding the unique side effects associated with approved and investigational CDK4/6 inhibitors, and develop preventive and emergent strategies to reduce or ameliorate these toxicities.

- Appraise clinical situations in which endocrine therapy alone or in combination with HER2-directed therapy should be considered in the management of ER-positive, HER2-positive metastatic disease.
- Consider the mechanisms of action, available research data and potential clinical benefits of other novel therapies under development, and counsel patients with advanced ER-positive breast cancer regarding ongoing research opportunities.

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 3 *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 3 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, these programs have 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 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/VPB118/Video/CME**. The corresponding audio program is available as an alternative at **ResearchToPractice.com/VPB118**.

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:

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No relevant conflicts of interest to disclose.

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Norton Healthcare Louisville, Kentucky No relevant conflicts of interest to disclose. **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 — A member of the AstraZeneca Group, 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.

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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

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Select Publications

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

Arpino G et al. Primary analysis of PERTAIN: A randomized, two-arm, open-label, multicenter phase II trial assessing the efficacy and safety of pertuzumab given in combination with trastuzumab plus an aromatase inhibitor in first-line patients with HER2-positive and hormone receptor-positive metastatic or locally advanced breast cancer. San Antonio Breast Cancer Symposium 2016;Abstract S3-04.

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

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. Everolimus (EVE) plus endocrine therapy in patients with estrogen receptor-positive (ER+), human epidermal growth factor receptor 2-negative (HER2-) advanced breast cancer (BC): First- and second-line data from the BOLERO-4 study. *Proc ASCO* 2017;Abstract 1010.

Corona SP, Generali D. Abemaciclib: A CDK4/6 inhibitor for the treatment of HR+/HER2- advanced breast cancer. *Drug Des Devel Ther* 2018;12:321-30.

Curigliano G et al. Ribociclib plus letrozole in early breast cancer: A presurgical, window-of-opportunity study. *Breast* 2016;28:191-8.

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

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

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

Janni W et al. First-line ribociclib plus letrozole for postmenopausal women with hormone receptor-positive (HR+), HER2-negative (HER2-) advanced breast cancer (ABC): MONALEESA-2 safety results. *Proc ASCO* 2017;Abstract 1047.

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

Lee A, Djamgoz MBA. Triple negative breast cancer: Emerging therapeutic modalities and novel combination therapies. *Cancer Treat Rev* 2018;62:110-22.

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.

Masuda N et al. Palbociclib in combination with letrozole as first-line treatment for advanced breast cancer: A Japanese phase II study. *Cancer Sci* 2018;109(3):803-13.

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

Robertson JF et al. Fulvestrant 500 mg versus anastrozole 1 mg for hormone receptor-positive advanced breast cancer (FALCON): An international, randomised, double-blind, phase 3 trial. *Lancet* 2016;388(10063):2997-3005.

Robson M et al. **Olaparib for metastatic breast cancer in patients with a germline BRCA mutation.** *N Engl J Med* 2017;377(6):523-33.

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.

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.

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.

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 NC et al; PALOMA3 Study Group. **Palbociclib in hormone-receptor-positive advanced breast cancer.** *N Engl J Med* 2015;373(3):209-19.