Addressing Current Questions and Emerging Considerations with the Use of PARP Inhibitors in the Management of Ovarian Cancer

Audio Program

CME Information

TARGET AUDIENCE

This activity is intended for gynecologic oncologists, medical oncologists, gynecologists and other healthcare providers involved in the treatment of gynecologic cancers.

OVERVIEW OF ACTIVITY

The American Cancer Society estimates that in 2019, 22,530 new cases of ovarian cancer will be diagnosed in the United States and 13,980 people will die of the disease. Epithelial ovarian cancer (EOC) comprises approximately 90% of malignant ovarian neoplasms, and this makes EOC the leading cause of death from gynecologic cancer in the United States. The largest recent development in ovarian cancer has been the introduction of poly(ADP-ribose) polymerase (PARP) inhibitors into the therapeutic milieu. Originally developed for and active in cancers with homologous recombination (HR) deficiencies — such as those harboring BRCA1 or BRCA2 mutations — PARP inhibitors have also demonstrated activity in the estimated 50% of ovarian cancer without BRCA1/2 gene mutations but deficient in other DNA repair genes.

Preclinical and clinical studies have suggested that PARP inhibitors may also be active in cancers deficient in signaling pathways that mitigate DNA repair or, in combination with DNA-damaging agents, independent of DNA repair dysfunction. These and other important achievements in the collective understanding of PARP inhibition as a mechanism to combat ovarian cancer development and progression have led to the FDA approval of multiple PARP inhibitors for patients with advanced ovarian cancer and deleterious or suspected deleterious germline BRCA mutations.

This CME program has been developed from the proceedings of a satellite symposium held during the 2019 Society of Gynecologic Oncology Annual Meeting on Women's Cancer. It features discussions with leading gynecologic cancer researchers regarding challenging cases and the emerging considerations that drive clinical decision-making about the use of PARP inhibitors in the management of ovarian cancer. This activity is designed to assist medical oncologists, gynecologic oncologists and other healthcare providers with the formulation of up-to-date clinical management strategies by providing information on the latest research developments and their potential application to routine practice.

LEARNING OBJECTIVES

- Recognize the clinical role of olaparib as maintenance therapy after first-line platinum-based chemotherapy for patients with advanced ovarian cancer and a deleterious or suspected deleterious BRCA germline or somatic mutation, and consider how the availability of this strategy affects current therapeutic algorithms.
- Identify patients with multiregimen-refractory ovarian cancer who may be appropriate candidates for a PARP inhibitor, and safely integrate PARP inhibitors into nonresearch therapy.
- Recognize the toxicities associated with PARP inhibitors commonly used in the care of patients with ovarian cancer, and offer supportive management strategies to minimize and/or ameliorate these side effects.
- Recall the biologic rationale for and ongoing research efforts evaluating the role of PARP inhibitors in combination with targeted therapy or immunotherapy, and refer appropriate patients for clinical trial participation.

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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 1 Medical Knowledge MOC point 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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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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Advisory Committee: Aravive Inc, AstraZeneca Pharmaceuticals LP, Clovis Oncology, Genentech, ImmunoGen Inc, Janssen Biotech Inc, Merck, OncoMed Pharmaceuticals Inc, Pfizer Inc, Roche Laboratories Inc, Samumed, Tesaro, VBL Therapeutics; **Contracted Research:** Clovis Oncology, Genentech, Merck, PTC Therapeutics, Roche Laboratories Inc.

MODERATOR — **Dr Love** is president and CEO of Research To Practice. Research To Practice 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, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheranostics Inc, Boehringer Ingelheim Pharmaceuticals Inc, Boston Biomedical Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Daiichi Sankyo Inc, Dendreon Pharmaceuticals Inc, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech, Genmab, Genomic Health Inc, Gilead Sciences Inc, Guardant Health, 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, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, Natera Inc, Novartis, Oncopeptides, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sandoz Inc, a Novartis Division, Sanofi Genzyme, Seattle Genetics, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro, Teva Oncology, Tokai Pharmaceuticals Inc and Tolero Pharmaceuticals.

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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

Last review date: June 2019

Expiration date: June 2020

Select Publications

Kathleen Moore, MD

Burger RA et al. **Incorporation of bevacizumab in the primary treatment of ovarian cancer.** *N Engl J Med* 2011;365(26):2473-83.

Gonzalez-Martin A et al. **A randomized, double-blind phase 3 trial of niraparib maintenance treatment in patients with HRD+ advanced ovarian cancer after response to front-line platinum-based chemotherapy.** *Proc ASCO* 2016;**Abstract TPS5606**.

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Professor Jonathan A Ledermann

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Robert L Coleman, MD

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