

PARP Inhibition in Four Common Cancers: Biology, Clinical Research Database and Therapeutic Strategy

Audio Program

CME Information

TARGET AUDIENCE

This activity is intended for medical oncologists, hematologists, surgeons, radiation oncologists and other healthcare professionals involved in basic, translational and clinical cancer research or treatment.

OVERVIEW OF ACTIVITY

Over the past 2 decades, the oncology community has witnessed a significant transformation in the way clinicians think about and approach the diagnosis and treatment of a variety of solid tumors. A multitude of specific diseases are now classified by the presence or absence of various genomic alterations or biomarker expression profiles and are managed differently based on this information. Given that one cancer may share a number of biologic similarities with another and that abnormalities found in one disease may be present in others, it is not surprising that an attempt is under way to apply knowledge and therapeutic understanding across multiple diseases. This rational approach to clinical research has yielded a growing body of evidence that a single “targeted” therapy can provide demonstrable benefit for patients with the same identified genetic abnormality regardless of the primary cancer type. One of the most compelling and recent examples of this phenomenon has been the documentation of efficacy and the subsequent FDA approval of PARP inhibitors for both breast and ovarian cancer. Researchers are also attempting to document the therapeutic potential of these agents in pancreatic and prostate cancer.

These proceedings from a satellite symposium held during the 2019 AACR Annual Meeting feature discussions with leading investigators about the role of PARP inhibition as a therapeutic strategy for patients with ovarian, breast, prostate and pancreatic cancer. By providing information on important developments, this activity will assist medical oncologists and other healthcare professionals in addressing existing management uncertainties and determining the clinical role of PARP inhibition in these diseases.

LEARNING OBJECTIVES

- Appraise available guideline recommendations and investigator perspectives regarding genetic testing in ovarian, breast and prostate cancer, and use the results of these assessments to guide long-term treatment planning.
- Describe the rationale for testing patients with prostate cancer or pancreatic adenocarcinoma for mutations in DNA repair genes, and assess the possible clinical role of PARP inhibitors in the care of these patients.
- Evaluate available research data and investigator perspectives on the role of FDA-approved PARP inhibitors for patients with ovarian cancer, and safely integrate these agents into routine clinical care.
- Evaluate the FDA approvals of olaparib and talazoparib for patients with metastatic breast cancer and a germline BRCA mutation, and discern how these agents can be appropriately and safely integrated into routine clinical practice.

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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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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

Neil Love, MD

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Kathleen Moore, MD

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Melinda Telli, MD

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Litton JK et al. **Talazoparib in patients with advanced breast cancer and a germline BRCA mutation.** *N Engl J Med* 2018;379(8):753-63.

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Michael Pishvaian, MD, PhD

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- Abida W et al. **Preliminary results from TRITON2: A phase 2 study of rucaparib in patients (pts) with metastatic castration-resistant prostate cancer (mCRPC) associated with homologous recombination repair (HRR) gene alterations.** *Proc ESMO* 2018;Abstract 793PD.
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- Smith MR et al. **Phase II study of niraparib in patients with metastatic castration-resistant prostate cancer (mCRPC) and biallelic DNA-repair gene defects (DRD): Preliminary results of GALAHAD.** Genitourinary Cancers Symposium 2019;Abstract 202.
- Yu EY et al. **Keynote-365 cohort a: Pembrolizumab (pembro) plus olaparib in docetaxel-pretreated patients (pts) with metastatic castrate-resistant prostate cancer (mCRPC).** Genitourinary Cancers Symposium 2019;Abstract 145.