

# Second Opinion:

## New and Emerging Treatment Strategies in the Management of Recurrent Ovarian Cancer

### CME Information

#### TARGET AUDIENCE

This activity is intended for medical oncologists and other healthcare providers involved in the treatment of ovarian cancer (OC).

#### OVERVIEW OF ACTIVITY

The American Cancer Society estimates that in 2017 more than 22,000 new cases of OC were diagnosed in the United States and more than 14,000 individuals died of the disease, making this the most lethal of the various gynecologic cancers. Fewer than 40% of women with OC are ultimately cured, and 70% of patients present with advanced disease, at which point palliation and improvements in quality of life are the primary goals of therapy. As with many other tumors, patient outcomes are critically dependent on effective multidisciplinary care, which in this case often includes contributions from gynecologic, medical and radiation oncologists as well as pathologists, diagnostic radiologists, oncology nurses and psychosocial services. In addition to the disease- and treatment-related morbidity and mortality associated with OC, pain, fatigue, lymphedema, depression/anxiety, infertility/child-bearing and sexual dysfunction are commonly occurring issues that must also be addressed in the care of these patients.

To bridge the gap between research and patient care, this video presentation by Dr Ursula A Matulonis uses a review of recent relevant publications and presentations, ongoing clinical trials and clinical investigator treatment preferences to assist medical oncologists and other healthcare providers involved in the treatment of OC with the formulation of up-to-date clinical management strategies.

#### LEARNING OBJECTIVES

- Evaluate current standard therapies and emerging treatment options, and use this information to appropriately select and sequence therapeutic approaches for patients with recurrent OC.
- Describe the rationale for targeting angiogenic pathways in gynecologic cancers, and consider the role of the anti-VEGF antibody bevacizumab in the initial and long-term treatment of advanced OC.
- Use available guidelines and consensus statements to inform the selection of validated genetic testing platforms

for patients with OC, and employ the resulting information to guide treatment planning and genetic counseling for these individuals.

- Understand the rationale for the investigation of PARP inhibitors as monotherapy for patients with BRCA mutation-positive advanced OC, and use this information to inform protocol and nonresearch treatment options for these individuals.
- Appreciate the FDA approval of rucaparib for patients with refractory advanced OC, and safely integrate this agent into clinical management as appropriate.
- Evaluate emerging Phase III evidence supporting the potential use of PARP inhibitor maintenance therapy for patients with recurrent, platinum-sensitive OC with and without BRCA mutations who are responding to platinum-based chemotherapy.
- Recognize the mechanisms of action, emerging efficacy data and toxicity profiles of investigational agents and immunotherapeutic strategies for the treatment of OC, and counsel appropriately selected patients about the availability of ongoing clinical trials.

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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:** AbbVie Inc, Amgen Inc, Astellas Pharma Global Development Inc, Astex Pharmaceuticals, AstraZeneca Pharmaceuticals LP, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Eisai Inc, Endocyte Inc, Exelixis Inc, Genentech BioOncology, GlaxoSmithKline, Incyte Corporation, Merck, Morphotek Inc, Tesaro 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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**Expiration date:** January 2019

## Select Publications

- Aghajanian C et al. **Final overall survival and safety analysis of OCEANS, a phase 3 trial of chemotherapy with or without bevacizumab in patients with platinum-sensitive recurrent ovarian cancer.** *Gynecol Oncol* 2015;139(1):10-6.
- Aghajanian C et al. **OCEANS: A randomized, double-blind, placebo-controlled phase III trial of chemotherapy with or without bevacizumab in patients with platinum-sensitive recurrent epithelial ovarian, primary peritoneal, or fallopian tube cancer.** *J Clin Oncol* 2012;30(17):2039-45.
- Balasubramaniam S et al. **FDA approval summary: Rucaparib for the treatment of patients with deleterious *BRCA* mutation-associated advanced ovarian cancer.** *Clin Cancer Res* 2017;[Epub ahead of print].
- Burger RA et al; Gynecologic Oncology Group. **Incorporation of bevacizumab in the primary treatment of ovarian cancer.** *N Engl J Med* 2011;365(26):2473-83.
- Coleman RL et al. **Bevacizumab and paclitaxel-carboplatin chemotherapy and secondary cytoreduction in recurrent, platinum-sensitive ovarian cancer (NRG Oncology/Gynecologic Oncology Group study GOG-0213): A multicentre, open-label, randomised, phase 3 trial.** *Lancet Oncol* 2017;18(6):779-91.
- Friedlander M et al. **Health-related quality of life (HRQOL) and patient-centered outcomes with maintenance olaparib compared with placebo following chemotherapy in patients with germline (g) *BRCA*-mutated (m) platinum-sensitive relapsed serous ovarian cancer (PSR SOC): SOLO2 phase III trial.** *Proc ASCO* 2017;Abstract 5507.
- Hamanishi J et al. **Safety and antitumor activity of anti-PD-1 antibody, nivolumab, in patients with platinum-resistant ovarian cancer.** *J Clin Oncol* 2015;33(34):4015-22.
- Lancaster JM et al. **Society of Gynecologic Oncology statement on risk assessment for inherited gynecologic cancer predispositions.** *Gyn Oncol* 2015;136(1):3-7.
- Ledermann JA et al. **Overall survival in patients with platinum-sensitive recurrent serous ovarian cancer receiving olaparib maintenance monotherapy: An updated analysis from a randomised, placebo-controlled, double-blind, phase 2 trial.** *Lancet Oncol* 2016;17(11):1579-89.
- Ledermann J et al. **Olaparib maintenance therapy in patients with platinum-sensitive relapsed serous ovarian cancer: A preplanned retrospective analysis of outcomes by *BRCA* status in a randomised phase 2 trial.** *Lancet Oncol* 2014;15(8):852-61.
- Matulonis UA et al. **Olaparib monotherapy in patients with advanced relapsed ovarian cancer and a germline *BRCA1/2* mutation: A multistudy analysis of response rates and safety.** *Ann Oncol* 2016;27(6):1013-9.
- Mirza MR et al. **Niraparib maintenance therapy in platinum-sensitive, recurrent ovarian cancer.** *N Engl J Med* 2016;375(22):2154-64.
- Moore KN et al. **IMGN853 (mirvetuximab soravtansine), a folate receptor alpha (FR $\alpha$ )-targeting antibody-drug conjugate (ADC): Single agent activity in platinum-resistant epithelial ovarian cancer (EOC) patients (pts).** *Proc ASCO* 2016;Abstract 5567.
- Norquist BM et al. **Inherited mutations in women with ovarian carcinoma.** *JAMA Oncol* 2016;2(4):482-90.
- Oza A et al. **An international, biomarker-directed, randomized, phase II trial of AZD1775 plus paclitaxel and carboplatin (P/C) for the treatment of women with platinum-sensitive, *TP53*-mutant ovarian cancer.** *Proc ASCO* 2015;Abstract 5506.
- Perren TJ et al; ICON7 Investigators. **A phase 3 trial of bevacizumab in ovarian cancer.** *N Engl J Med* 2011;365(26):2844-96.
- Pujade-Lauraine E et al. **Bevacizumab combined with chemotherapy for platinum-resistant recurrent ovarian cancer: The AURELIA open-label randomized phase III trial.** *J Clin Oncol* 2014;32(13):1302-8.
- Sandhu SK et al. **The poly(ADP-ribose) polymerase inhibitor niraparib (MK4827) in *BRCA* mutation carriers and patients with sporadic cancer: A phase 1 dose-escalation trial.** *Lancet Oncol* 2013;14(9):882-92.