# Investigator Perspectives on the Current and Future Management of Newly Diagnosed Ovarian Cancer

## Video Program

## CME Information

### TARGET AUDIENCE

This activity is intended for medical oncologists, gynecologic oncologists, radiation oncologists, oncology fellows, oncology nurses and other healthcare providers involved in the treatment of ovarian cancer.

### OVERVIEW OF ACTIVITY

Ovarian cancer is the fifth leading cause of mortality from cancer among women, and survival rates remain low as most patients present with advanced manifestations of the disease. This poor prognosis is attributable to the inadequate effect of chemotherapy as primary treatment after optimal debulking surgery because an estimated 70% of patients will experience relapse despite receiving standard therapy. To improve this dynamic, different strategies, such as neoadjuvant chemotherapy and intravenous versus intraperitoneal chemotherapy, have been evaluated and subsequently introduced into the treatment milieu. In reality, however, these have done little to modify the natural course of the disease. Angiogenesis inhibition is another rational strategy that has been assessed, most notably with bevacizumab. Angiogenesis is an important process contributing to the progression of ovarian cancer, and randomized trials support the recent FDA approval of bevacizumab in combination with carboplatin and paclitaxel followed by single-agent bevacizumab for patients with advanced disease after initial surgical resection.

Consensus-based guidelines such as those published by NCCN (National Comprehensive Cancer Network), ASCO (American Society of Clinical Oncology) and ESMO (European Society of Medical Oncology) aim to support oncologists and other cancer clinicians in making rational treatment recommendations. However, in situations where multiple "acceptable" therapeutic options exist such guidelines may not be particularly helpful at the time of decision-making. Because these resources simply enumerate all diagnostic or treatment strategies supported by diverse levels of evidence rather than providing perspectives on the benefits and risks of one strategy over another, they often leave the clinician to discern whether an optimal clinical approach exists and what it would be. To bridge the gap between research and patient care, this CME program features in-depth discussions with Dr Bradley J Monk and Prof Jonathan A Ledermann to review key research information, including clinical trial designs, published data sets and ongoing and planned study concepts, and also presents review and analysis of the results from a comprehensive survey of 24 medical and gynecologic oncology experts focused on the management of newly diagnosed ovarian cancer.

### LEARNING OBJECTIVES

- Review available efficacy and safety data with the use of neoadjuvant chemotherapy followed by surgical cytoreduction for patients with Stage III or IV ovarian cancer, and identify individuals for whom this approach may be preferable to primary debulking surgery followed by adjuvant chemotherapy.
- Appreciate the influence of patient age, performance status, tumor burden and other biologic and clinical factors on the selection of treatment for newly diagnosed ovarian cancer.
- Develop individualized management strategies for patients with optimally debulked Stage II or III ovarian cancer, including the use of intravenous versus intraperitoneal chemotherapy.
- Summarize existing research data and ongoing clinical trials documenting the risks and benefits of immune checkpoint inhibitors in combination with anti-angiogenic agents and/or PARP inhibitors in the management of newly diagnosed advanced ovarian cancer.
- Recognize the toxicities associated with chemotherapy alone or in combination with bevacizumab for patients with newly diagnosed ovarian cancer, and offer supportive management strategies to minimize and/or ameliorate these side effects.

### ACCREDITATION STATEMENT

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### CREDIT DESIGNATION STATEMENT

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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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**Advisory Committee:** Artios Pharma, AstraZeneca Pharmaceuticals LP, Clovis Oncology, Cristal Therapeutics, Merck Sharp & Dohme Corp, Pfizer Inc, Roche Laboratories Inc, Seattle Genetics; **Contracted Research:** AstraZeneca Pharmaceuticals LP, Merck Sharp & Dohme Corp; **Data and Safety Monitoring Board/Committee:** Regeneron Pharmaceuticals Inc; **Speakers Bureau:** AstraZeneca Pharmaceuticals LP, Clovis Oncology.

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**Consulting Agreements:** AbbVie Inc, Advaxis Inc, Agenus Inc, Amgen Inc, AstraZeneca Pharmaceuticals LP, Biodesix Inc, Clovis Oncology, Conjupro Biotherapeutics Inc, Genentech, Genmab, Gradalis Inc, ImmunoGen Inc, Immunomedics, Incyte Corporation, Janssen Biotech Inc, Mateon Therapeutics, Merck, Myriad Genetic Laboratories Inc, Perthera Inc, Pfizer Inc, Precision Therapeutics Inc, Puma Biotechnology Inc, Roche Laboratories Inc, Samumed, Takeda Oncology, Tesaro, VBL Therapeutics; **Speakers Bureau:** AstraZeneca Pharmaceuticals LP, Clovis Oncology, Genentech, Janssen Biotech Inc, Roche Laboratories Inc, Tesaro.

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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


**A phase 3 placebo-controlled study of carboplatin/paclitaxel with or without concurrent and continuation maintenance veliparib (PARP inhibitor) in subjects with previously untreated stages III or IV high-grade serous epithelial ovarian, fallopian tube, or primary peritoneal cancer (VELIA).** NCT02470585

**A phase 3, randomized, double-blind, placebo-controlled, multicenter study of niraparib maintenance treatment in patients with advanced ovarian cancer following response on front-line platinum-based chemotherapy (PRIMA).** NCT02655016

Armstrong DK et al. **Intraperitoneal cisplatin and paclitaxel in ovarian cancer.** *N Engl J Med* 2006;354(1):34-43.

Burger RA et al. **Final overall survival (OS) analysis of an international randomized trial evaluating bevacizumab (BEV) in the primary treatment of advanced ovarian cancer: A NRG oncology/Gynecologic Oncology Group (GOG) study.** *Proc ASCO* 2018;**Abstract 5517**.

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

Chan JK et al. **Weekly versus every-3-week paclitaxel and carboplatin for ovarian cancer.** *N Engl J Med* 2016;374(8):738-48.

Clamp AR et al. **Response to neoadjuvant chemotherapy in ICON8: A GCIG phase III randomised trial evaluating weekly dose-dense chemotherapy integration in first-line epithelial ovarian/fallopian tube/primary peritoneal carcinoma (EOC) treatment.** *Proc ESMO* 2018;**Abstract 943PD**.

Coleman RL et al. **Rucaparib maintenance treatment for recurrent ovarian carcinoma after response to platinum therapy (ARIEL3): A randomised, double-blind, placebo-controlled, phase 3 trial.** *Lancet* 2017;390(10106):1949-61.

du Bois A et al. **Incorporation of pazopanib in maintenance therapy for ovarian cancer.** *J Clin Oncol* 2014;32(30):3374-82.

Eskander RN et al. **Correlation between surgeon's assessment and radiographic evaluation of residual disease in women with advanced stage ovarian cancer reported to have undergone optimal surgical cytoreduction: An NRG Oncology/Gynecologic Oncology Group study.** *Gynecol Oncol* 2018;149(3):525-30.

Fabbro M et al. **Efficacy and safety of niraparib as maintenance treatment in older patients (≥ 70 years) with recurrent ovarian cancer: Results from the ENGOT-OV16/NOVA trial.** *Gynecol Oncol* 2019;152(3):560-7.

Friedlander M et al. **Long-term efficacy, tolerability and overall survival in patients with platinum-sensitive, recurrent high-grade serous ovarian cancer treated with maintenance olaparib capsules following response to chemotherapy.** *Br J Cancer* 2018;119(9):1075-85.

Friedlander M et al. **Quality of life in patients with advanced epithelial ovarian cancer (EOC) randomized to maintenance pazopanib or placebo after first-line chemotherapy in the AGO-OVAR 16 trial. Measuring what matters — Patient-centered end points in trials of maintenance therapy.** *Ann Oncol* 2018;29(3):737-43.

González-Martín A et al. **Exploratory outcome analyses according to stage and/or residual disease in the ICON7 trial of carboplatin and paclitaxel with or without bevacizumab for newly diagnosed ovarian cancer.** *Gynecol Oncol* 2019;152(1):53-60.

González-Martín A et al. **A prospective evaluation of tolerability of niraparib dosing based upon baseline body weight (wt) and platelet (plt) count: Blinded pooled interim safety data from the PRIMA Study.** *Proc ESMO* 2018;**Abstract 941PD**.

Gopalakrishnan V et al. **The influence of the gut microbiome on cancer, immunity and cancer immunotherapy.** *Cancer Cell* 2018;33(4):570-80.

Gourley C et al. **Increased incidence of visceral metastases in Scottish patients with BRCA1/2-defective ovarian cancer: An extension of the ovarian BRCAness phenotype.** *J Clin Oncol* 2010;28(15):2505-11.

Monk BJ et al. **A prospective evaluation of tolerability of niraparib dosing based upon baseline body weight and platelet count: Blinded pooled interim safety data from the ENGOT-OV26/PRIMA study.** *Proc SGO* 2019;**Abstract 3**.

Monk BJ, Chan JK. **Is intraperitoneal chemotherapy still an acceptable option in primary adjuvant chemotherapy for advanced ovarian cancer?** *Ann Oncol* 2017;28(suppl 8):viii40-viii45.

Monk BJ et al. **Antiangiogenic agents as a maintenance strategy for advanced epithelial ovarian cancer.** *Crit Rev Oncol Hematol* 2013;86(2):161-75.

Monk BJ et al. **Patient reported outcomes of a randomized, placebo-controlled trial of bevacizumab in the front-line treatment of ovarian cancer: A Gynecologic Oncology Group study.** *Gynecol Oncol* 2013;128(3):573-8.

Moore KN et al. **Niraparib monotherapy for late-line treatment of ovarian cancer (QUADRA): A multicentre, open-label, single-arm, phase 2 trial.** *Lancet Oncol* 2019;20(5):636-48.

## Select Publications


Moore K et al. **Maintenance olaparib in patients with newly diagnosed advanced ovarian cancer.** *N Engl J Med* 2018;379(26):2495-505.

Oza AM et al. **Olaparib combined with chemotherapy for recurrent platinum-sensitive ovarian cancer: A randomised phase 2 trial.** *Lancet Oncol* 2015;16(1):87-97.

Oza AM et al. **Standard chemotherapy with or without bevacizumab for women with newly diagnosed ovarian cancer (ICON7): Overall survival results of a phase 3 randomised trial.** *Lancet Oncol* 2015;16(8):928-36.

Ray-Coquard I et al. **PAOLA-1: An ENGOT/GCIG phase III trial of olaparib versus placebo combined with bevacizumab as maintenance treatment in patients with advanced ovarian cancer following first-line platinum-based chemotherapy plus bevacizumab.** *Proc ASCO* 2017;**Abstract TPS5605**.

Rouzier R et al. **Efficacy and safety of bevacizumab-containing neoadjuvant therapy followed by interval debulking surgery in advanced ovarian cancer: Results from the ANTHALYA trial.** *Eur J Cancer* 2017;70:133-42.

Tewari KS et al. **Early initiation of chemotherapy following complete resection of advanced ovarian cancer associated with improved survival: NRG Oncology/Gynecologic Oncology Group study.** *Ann Oncol* 2016;27(1):114-21.

Timmermans M et al. **Interval between debulking surgery and adjuvant chemotherapy is associated with overall survival in patients with advanced ovarian cancer.** *Gynecol Oncol* 2018;150(3):446-50.

**Trial on radical upfront surgery in advanced ovarian cancer (TRUST). NCT02828618**

Walker JL et al. **Randomized trial of intravenous versus intraperitoneal chemotherapy plus bevacizumab in advanced ovarian carcinoma: An NRG Oncology/Gynecologic Oncology Group Study.** *J Clin Oncol* 2019;[Epub ahead of print].

Walker JL et al. **A phase III trial of bevacizumab with IV versus IP chemotherapy in ovarian, fallopian tube, and peritoneal carcinoma NCI-supplied agent(s): A GOG/NRG trial (GOG 252).** *Proc SGO* 2016;**Abstract 6**.