Oncology Tumor Panel Series

Oncologist and Nurse Investigators Consult on Actual Patients from the Practices of the Invited Faculty

Part 5 — Ovarian Cancer

CNE Information

TARGET AUDIENCE

This activity has been designed to meet the educational needs of oncology nurses, nurse practitioners and clinical nurse specialists involved in the treatment of ovarian cancer (OC).

OVERVIEW OF ACTIVITY

The management of OC has become more complex thanks in part to early clinical trial results published with both novel cytotoxics and agents targeting distinct signaling pathways, coupled with available data identifying the clinical yet controversial utility of new therapeutic approaches. In 2015 in the United States alone it is estimated the disease will culminate in 21,290 new cases and 14,180 deaths. Standard practice guidelines support the use of maximal cytoreductive surgery, comprehensive staging and primary medical treatment with intraperitoneal and/or intravenous chemotherapy regimens. Patient selection for the method administered is linked to age, current health status and threshold for treatment-induced toxicity.

Given the high rate of recurrence of OC there is an urgent need to explore alternative therapeutic options. Several biologically targeted agents, including bevacizumab and PARP inhibitors, have been investigated in the up-front setting as potential therapeutic strategies for patients with relapsed disease. The potential benefits of these therapeutic approaches mandate that clinicians be aware of emerging data and knowledgeable of available protocols to effectively counsel patients in this regard. Additionally, a number of novel agents and approaches are being leveraged in an attempt to improve the treatment course for patients with advanced OC. Promising early clinical trial results of novel cytotoxics and agents targeting distinct signaling pathways in patients with current OC suggest that new therapies and regimens with unique side-effect and toxicity profiles may enter the armamentarium of treatment options in the next several years. Oncology nurses play an integral role in supporting patients through therapy and are essential to the successful delivery of systemic anticancer therapy and in the maintenance of patient physical and psychosocial well-being. In order to offer optimal patient care — including the option of clinical trial participation — oncology nurses, nurse practitioners and clinical nurse specialists involved in the care of these patients must be well informed of these advances and the rapidly evolving treatment paradigms for patients with OC.

These video proceedings from the fifth part of a 5-part integrated CNE curriculum originally held at the 2015 ONS Annual Congress feature discussions with leading OC investigators and their nursing counterparts regarding actual patient cases and recent clinical research findings affecting the optimal therapeutic and supportive care for each patient scenario.

PURPOSE STATEMENT

By providing information on the latest research developments in the context of expert perspectives, this CNE activity will assist oncology nurses, nurse practitioners and clinical nurse specialists with the formulation of state-of-the-art clinical management strategies to facilitate optimal care of patients with OC.

LEARNING OBJECTIVES

- Apply existing and emerging research data to the therapeutic and supportive care of patients with OC.
- Use case-based learning to gain familiarity with new therapeutic strategies for OC in order to facilitate improved counseling for patients.
- Develop an evidence-based algorithm for the prevention and amelioration of side effects associated with chemotherapeutic and biologic agents used in the management of OC.
- Appreciate the recent FDA approval of olaparib for patients with highly refractory advanced OC, and safely integrate this therapeutic option into clinical practice.
- Identify opportunities to enhance the collaborative role of oncology nurses in the comprehensive biopsychosocial care of patients with OC to optimize clinical and quality-of-life outcomes.
- Recall ongoing trials of investigational approaches and agents in OC, and refer patients and obtain consent for study participation.

ACCREDITATION STATEMENT

Research To Practice is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

CREDIT DESIGNATION STATEMENT

This educational activity for 1.6 contact hours is provided by Research To Practice during the period of August 2015 through August 2016.

FOR SUCCESSFUL COMPLETION

This is a video CNE program. To receive credit, participants should read the learning objectives and faculty disclosures, watch the video, complete the Post-test with a score of 75% or better and fill out the Educational Assessment and Credit Form located at ResearchToPractice.com/ONSOvarian2015/CNE.

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 potential conflicts of interest with faculty, planners and managers of CNE activities. Real or apparent 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 reviewer for fair balance, scientific objectivity of studies referenced and patient care recommendations.

FACULTY — The following faculty (and their spouses/partners) reported real or apparent conflicts of interest, which have been resolved through a conflict of interest resolution process:

Paula J Anastasia, RN, MN, AOCN

Gyn-Oncology Clinical Nurse Specialist Cedars-Sinai Medical Center Los Angeles, California

Speakers Bureau: Eisai Inc, Genentech BioOncology.

Deborah K Armstrong, MD

Director, Breast and Ovarian Surveillance Service Professor of Oncology, Gynecology and Obstetrics The Sidney Kimmel Comprehensive Cancer Center The Johns Hopkins University Baltimore, Maryland

Advisory Committee: Eisai Inc; Contracted Research: Astex Pharmaceuticals, AstraZeneca Pharmaceuticals LP, Clovis Oncology, Eisai Inc, Genentech BioOncology, Incyte Corporation, MedImmune Inc, VentiRx Pharmaceuticals Inc; Other Remunerated Activities: Abbott Laboratories, Sanofi.

Vivian Gonzalez, MSN, NP-C, AOCNP

Department of Medical Oncology City of Hope Comprehensive Cancer Center Duarte, California

No real or apparent conflicts of interest to disclose.

Bradley J Monk, MD

Professor and Director Division of Gynecologic Oncology Vice Chair, Department of Obstetrics and Gynecology University of Arizona Cancer Center — Phoenix Creighton University School of Medicine at Dignity Health St Joseph's Hospital and Medical Center Phoenix, Arizona **Consulting Agreements:** Advaxis Inc, Amgen Inc, AstraZeneca Pharmaceuticals LP, Cerulean Pharma Inc, Genentech BioOncology, GlaxoSmithKline, Gradalis Inc, Merck, Roche Laboratories Inc, TESARO Inc, Verastem Inc; **Contracted Research:** Amgen Inc, Array BioPharma Inc, Genentech BioOncology, Janssen Biotech Inc, Johnson & Johnson Pharmaceuticals, Lilly, Novartis Pharmaceuticals Corporation, TESARO Inc; **Speakers Bureau:** Genentech BioOncology, Roche Laboratories Inc.

MODERATOR — **Dr Love** is president and CEO of Research To Practice, which receives funds in the form of educational grants to develop CME/CNE activities from the following commercial interests: AbbVie Inc, Amgen Inc, Astellas Scientific and Medical Affairs Inc, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheranostics Inc, Boehringer Ingelheim Pharmaceuticals Inc, Boston Biomedical Pharma Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Daiichi Sankyo Inc, Dendreon Corporation, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech BioOncology, Genomic Health Inc, Gilead Sciences Inc, ImmunoGen Inc, Incyte Corporation, Janssen Biotech Inc, Jazz Pharmaceuticals Inc, Lilly, Medivation Inc, Merck, Myriad Genetic Laboratories Inc, NanoString Technologies, Novartis Pharmaceuticals Corporation, Novocure, Onyx Pharmaceuticals, an Amgen subsidiary, Pharmacyclics Inc, Prometheus Laboratories Inc, Regeneron Pharmaceuticals, Sanofi, Seattle Genetics, Sigma-Tau Pharmaceuticals Inc, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Teva Oncology, Tokai Pharmaceuticals Inc and VisionGate Inc.

RESEARCH TO PRACTICE STAFF AND EXTERNAL

REVIEWERS — The scientific staff and reviewers for Research To Practice have no real or apparent conflicts of interest to disclose.

This educational activity contains discussion of published and/ or investigational uses of agents that are not indicated by the Food and Drug Administration. Research To Practice does not recommend the use of any agent outside of the labeled indications. Please refer to the official prescribing information for each product for discussion of approved indications, contraindications and warnings. The opinions expressed are those of the presenters and are not to be construed as those of the publisher or grantor.

This activity is supported by an educational grant from AstraZeneca Pharmaceuticals LP.

Hardware/Software Requirements:

A high-speed Internet connection A monitor set to 1280 x 1024 pixels or more Internet Explorer 7 or later, Firefox 3.0 or later, Chrome, Safari 3.0 or later Adobe Flash Player 10.2 plug-in or later Adobe Acrobat Reader (Optional) Sound card and speakers for audio

Last review date: August 2015 Expiration date: August 2016

There is no implied or real endorsement of any product by RTP or the American Nurses Credentialing Center.

Select Publications

A phase 3 randomized double-blind trial of maintenance with niraparib versus placebo in patients with platinum sensitive ovarian cancer. NCT01847274

A phase III, randomised, double blind, placebo controlled, multicentre study of olaparib maintenance monotherapy in patients with platinum sensitive relapsed ovarian cancer who are in complete or partial response following platinum based chemotherapy and whose tumours carry loss of function somatic BRCA mutation(s) or loss of function mutation(s) in tumour homologous recombination repair-associated genes. NCT02392676

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.** *Proc ASCO* 2011; Abstract LBA5007.

Aghajanian C et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: A Gynecologic Oncology Group study. *J Clin Oncol* 2011;29(16):2259-65.

AGO-OVAR 2.21: Evaluation of the best therapeutic index for patients with platinum-sensitive ovarian cancer when treatment with bevacizumab and gemcitabine/carboplatin or with bevacizumab and PLD/carboplatin. NCT01837251

AGO-OVAR 17: A prospective randomised phase III trial to evaluate optimal treatment duration of first-line bevacizumab in combination with carboplatin and paclitaxel in patients with primary epithelial ovarian, fallopian tube or peritoneal cancer. NCT01462890

ARIEL-3: A phase 3 study of rucaparib as switch maintenance after platinum in relapsed high grade serous and endometrioid ovarian cancer. NCT01968213

Audeh MW et al. Oral poly(ADP-ribose) polymerase inhibitor olaparib in patients with BRCA1 or BRCA2 mutations and recurrent ovarian cancer: A proof-of-concept trial. *Lancet* 2010;376(9737):245-51.

AURELIA: A multi-center, open-label, randomised, two-arm phase III trial of the effect on progression free survival of bevacizumab plus chemotherapy versus chemotherapy alone in patients with platinum-resistant, epithelial ovarian, fallopian tube or primary peritoneal cancer. NCT00976911

Celejewska A et al. Stereotactic radiotherapy in epithelial ovarian cancer brain metastases patients. J Ovarian Res 2014;7:79.

Coleman RL et al. A phase II evaluation of the potent, highly selective PARP inhibitor veliparib in the treatment of persistent or recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer in patients who carry a germline BRCA1 or BRCA2 mutation — An NRG Oncology/Gynecologic Oncology Group study. *Gynecol Oncol* 2015;137(3):386-91.

GOG-0213: A phase III randomized controlled clinical trial of carboplatin and paclitaxel (or gemcitabine) alone or in combination with bevacizumab (NSC 704865) followed by bevacizumab and secondary cytoreductive surgery in platinum-sensitive, recurrent ovarian, peritoneal primary and fallopian tube cancer. NCT00565851

GOG-0225: Can diet and physical activity modulate ovarian, fallopian tube and primary peritoneal cancer progression-free survival? NCT00719303

GOG-0252: A phase III clinical trial of bevacizumab with IV versus IP chemotherapy in ovarian, fallopian tube, and primary peritoneal carcinoma NCI-supplied agent(s): Bevacizumab (NSC 704865). NCT00951496

Howell SB et al. Intraperitoneal cisplatin with systemic thiosulfate protection. Ann Intern Med 1982;97(6):845-51.

Kaufman B et al. Olaparib monotherapy in patients with advanced cancer and a germline BRCA1/2 mutation. *J Clin Oncol* 2015;33(3):244-50.

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.

Ledermann J et al. **Olaparib maintenance therapy in platinum-sensitive relapsed ovarian cancer.** *N Engl J Med* 2012;366(15):1382-92.

Ledermann JA et al. Olaparib maintenance therapy in patients with platinum-sensitive relapsed serous ovarian cancer (SOC) and a BRCA mutation (BRCAm). *Proc ASCO* 2013; Abstract 5505.

Ledermann JA et al. Phase II randomized placebo-controlled study of olaparib (AZD2281) in patients with platinum-sensitive relapsed serous ovarian cancer (PSR SOC). *Proc ASCO* 2011; Abstract 5003.

Liu J et al. A randomized phase 2 trial comparing efficacy of the combination of the PARP inhibitor olaparib and the antiangiogenic cediranib against olaparib alone in recurrent platinum-sensitive ovarian cancer. *Proc ASCO* 2014; Abstract LBA5500.

Select Publications

Michie CO et al. Final results of the phase I trial of niraparib (MK4827), a poly(ADP)ribose polymerase (PARP) inhibitor incorporating proof of concept biomarker studies and expansion cohorts involving BRCA1/2 mutation carriers, sporadic ovarian, and castration resistant prostate cancer (CRPC). *Proc ASCO* 2013;Abstract 2513.

MITO16MANGO2b: Multicenter phase III randomized study with second line chemotherapy plus or minus bevacizumab in patients with platinum sensitive epithelial ovarian cancer recurrence after a bevacizumab/chemotherapy first line. NCT01802749

Norquist BM et al. Characteristics of women with ovarian carcinoma who have BRCA1 and BRCA2 mutations not identified by clinical testing. *Gynecol Oncol* 2013;128(3):483-7.

NOVA: A phase 3 randomized double-blind trial of maintenance with niraparib versus placebo in patients with platinum sensitive ovarian cancer. NCT01847274

OCEANS: A phase III, multicenter, randomized, blinded, placebo-controlled trial of carboplatin and gemcitabine plus bevacizumab in patients with platinum-sensitive recurrent ovary, primary peritoneal, or fallopian tube carcinoma. NCT00434642

Pietzner K et al. Brain metastases from epithelial ovarian cancer: Overview and optimal management. *Anticancer Res* 2009;29(7):2793-8.

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.

Pujade-Lauraine E et al. AURELIA: A randomized phase III trial evaluating bevacizumab (BEV) plus chemotherapy (CT) for platinum (PT)-resistant recurrent ovarian cancer (OC). *Proc ASCO* 2012; Abstract LBA5002.

ROSIA: Global study to assess the addition of bevacizumab to carboplatin and paclitaxel as front-line treatment of epithelial ovarian cancer, fallopian tube carcinoma or primary peritoneal carcinoma. NCT01239732

Sánchez-Pérez I. DNA repair inhibitors in cancer treatment. Clin Transl Oncol 2006;8(9):642-6.

SOLO-1: A phase III, randomised, double blind, placebo controlled, multicentre study of olaparib maintenance monotherapy in patients with BRCA mutated advanced (FIGO Stage III-IV) ovarian cancer following first line platinum based chemotherapy. NCT01844986

SOLO-2: A phase III randomised, double blind, placebo controlled study of olaparib maintenance monotherapy in platinum sensitive relapsed BRCA mutated ovarian cancer patients with a complete or partial response following platinum based chemo-therapy. NCT01874353

Tewari D et al. Long-term survival advantage and prognostic factors associated with intraperitoneal chemotherapy treatment in advanced ovarian cancer: A gynecologic oncology group study. *J Clin Oncol* 2015;33(13):1460-6.

Vergote I et al. Prognostic factors in stage I ovarian carcinoma. Verh K Acad Geneeskd Belg 2001;63(3):257-71.