Oncology Grand Rounds

Nurse and Physician Investigators Discuss New Agents, Novel Therapies and Actual Cases from Practice

Part 2: Cancer Immunotherapy

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 cancer.

OVERVIEW OF ACTIVITY

The past several years have seen an explosion in the emergence of potential therapies that leverage the natural ability of the human body to attack and treat cancer. Known as immune-mediated therapies, or cancer immunotherapies, these promising treatments are taking center stage at medical conferences and generating excitement all over the world. The newest and perhaps most exciting arena in cancer immunotherapy has been the development and assessment of immune-modulating antibodies, or checkpoint immune modulators. To date, studies have demonstrated that these agents are highly active across a number of diseases, most notably melanoma, renal cell carcinoma, non-small cell lung cancer and bladder cancer, representing the dawn of a new era in oncologic treatment that may effectively transform chemotherapy infusion rooms into immunotherapy delivery centers.

The introduction of these therapies has created a multitude of uncertainties, important clinical questions and knowledge gaps awaiting resolution. This seems to be particularly true among oncology nurses, who play an integral role in the successful delivery of systemic anticancer therapy and the preservation of patient physical and psychosocial well-being, which require a varied set of skills and an extensive knowledge base. These video proceedings from the second part of a 7-part integrated CNE curriculum originally held at the 2017 ONS Annual Congress feature discussions with leading oncology 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.

LEARNING OBJECTIVES

- Recognize the FDA-approved indications for the use of immune checkpoint inhibitors in a variety of solid tumors and Hodgkin lymphoma, and identify patients for whom treatment with these agents would be appropriate.
- Describe available and emerging research evaluating the use of biomarkers or other clinical features indicative of response to immune checkpoint inhibitors, and use this information to inform treatment decision-making and/or clinical trial referral.
- Develop a plan to manage the side effects associated with immune checkpoint inhibitors to support quality of life and continuation of treatment.
- Consider the potential implications of immune checkpoint inhibition in individuals with preexisting autoimmune disorders to facilitate appropriate patient education and counseling.
- Recall the design of ongoing clinical trials evaluating novel immunotherapeutic approaches, alone or in combination with other systemic therapies, and counsel appropriately selected patients about availability and 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 July 2017 through July 2018.

This activity is awarded 1.6 ANCC pharmacotherapeutic contact hours.

ONCC/ILNA CERTIFICATION INFORMATION

The program content has been reviewed by the Oncology Nursing Certification Corporation (ONCC) and is acceptable for recertification points. To review certification qualifications please visit **ResearchToPractice.com/ONS2017/ILNA**.

ONCC review is only for designating content to be used for recertification points and is not for CNE accreditation. CNE programs must be formally approved for contact hours by an acceptable accreditor/approver of nursing CE to be used for recertification by ONCC. If the CNE provider fails to obtain formal approval to award contact hours by an acceptable

accrediting/approval body, no information related to ONCC recertification may be used in relation to the program.

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 80% or better and fill out the Educational Assessment and Credit Form located at **ResearchToPractice.com/ONSImmunotherapy2017/CNE**.

CONTENT VALIDATION AND DISCLOSURES

Research To Practice (RTP) is committed to providing its participants with high-quality, unbiased and state-of-the-art education. We assess conflicts of interest with faculty, planners and managers of CNE activities. 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 relevant conflicts of interest, which have been resolved through a conflict of interest resolution process:

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Contracted Research: Abbott Laboratories, AbbVie Inc, Apexigen, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Celgene Corporation, Daiichi Sankyo Inc, Eisai Inc, EMD Serono Inc, Five Prime Therapeutics Inc, Forty Seven Inc, Genentech BioOncology, Gilead Sciences Inc, GlaxoSmithKline, Incyte Corporation, Kolltan Pharmaceuticals Inc, Leap Therapeutics Inc, Lilly, MacroGenics Inc, MedImmune Inc, Merck, Novartis, OncoMed Pharmaceuticals Inc, Onyx Pharmaceuticals, an Amgen subsidiary, Pfizer Inc, Roche Laboratories Inc, Sanofi Genzyme, Stemcentrx, Taiho Oncology Inc, Takeda Oncology, TG Therapeutics 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 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: July 2017

Expiration date: July 2018

Select Publications

Amos SM et al. **Autoimmunity associated with immunotherapy of cancer.** *Blood* 2011;118(3):499-509.

Balar AV et al. **Atezolizumab as first-line treatment in cisplatin-ineligible patients with locally advanced and metastatic urothelial carcinoma: A single-arm, multicentre, phase 2 trial.** *Lancet* 2017;389(10064):67-76.

Batlevi CL et al. **Novel immunotherapies in lymphoid malignancies.** *Nat Rev Clinic Oncol* 2016;13(1):25-40.

Bellmunt J et al. **Pembrolizumab as second-line therapy for advanced urothelial carcinoma.** *N Engl J Med* 2017; 376(11):1015-26.

Bendell J et al. **Clinical activity and safety of cobimetinib (cobi) and atezolizumab in colorectal cancer (CRC).** *Proc ASCO* 2016;**Abstract 3502**.

Ebert PJ et al. **MAP kinase inhibition promotes T cell and anti-tumor activity in combination with PD-L1 checkpoint blockade.** *Immunity* 2016;44(3):609-21.

Eggermont AM et al. **Adjuvant ipilimumab versus placebo after complete resection of high-risk stage III melanoma (EORTC 18071): A randomised, double-blind, phase 3 trial.** *Lancet Oncol* 2015;16(5):522-30.

Garon EB et al. **Pembrolizumab for the treatment of non-small-cell lung cancer.** *N Engl J Med* 2015;372(21):2018-28.

Giannakis M et al. **Genomic correlates of immune-cell infiltrates in colorectal carcinoma.** *Cell Reports* 2016;15:857-65.

Hegde PS et al. **The where, the when, and the how of immune monitoring for cancer immunotherapies in the era of checkpoint inhibition.** *Clin Cancer Res* 2016;22(8):1865-74.

Imai K, Yamamoto H. **Carcinogenesis and microsatellite instability: The interrelationship between genetics and epigenetics.** *Carcinogenesis* 2008;29(4):673-80.

Johnson DB et al. **Ipilimumab therapy in patients with advanced melanoma and preexisting autoimmune disorders.** *JAMA Oncol* 2016;2(2):234-40.

Khan SA et al. **Prevalence of autoimmune conditions among patients with lung cancer: Implications for immunotherapy treatment options.** *Proc ASCO* 2016;**Abstract 9039**.

Kim JM, Chen DS. **Immune escape to PD-L1/PD-1 blockade: Seven steps to success (or failure).** *Ann Oncol* 2016; 27(8):1492-504.

Kyi C et al. **Ipilimumab in patients with melanoma and autoimmune disease.** *J Immuno Ther Cancer* 2014;2(1):35.

Langer CJ et al. **Carboplatin and pemetrexed with or without pembrolizumab for advanced, non-squamous non-small-cell lung cancer: A randomised, phase 2 cohort of the open-label KEYNOTE-021 study.** *Lancet Oncol* 2016;17(11):1497-508.

Le DT et al. **Programmed death-1 blockade in mismatch repair deficient colorectal cancer.** *Proc ASCO* 2016;**Abstract 103**.

Llosa NJ et al. ***T*he vigorous immune microenvironment of microsatellite instable colon cancer is balanced by multiple counter-inhibitory checkpoints.** *Cancer Discov* 2015;5(1):43-51.

Long GV et al. **Overall survival and durable responses in patients with BRAF V600-mutant metastatic melanoma receiving dabrafenib combined with trametinib.** *J Clin Oncol* 2016;34(8):871-8.

Menzies AM et al. **Anti-PD-1 therapy in patients with advanced melanoma and preexisting autoimmune disorders or major toxicity with ipilimumab.** *Ann Oncol* 2017;28(2):368-76.

Moskowitz CH et al. **Pembrolizumab in relapsed/refractory classical Hodgkin lymphoma: Primary end point analysis of the phase 2 Keynote-087 study.** *Proc ASH* 2016;**Abstract 1107**.

Motzer RJ et al. **Nivolumab versus everolimus in advanced renal-cell carcinoma.** *N Engl J Med* 2015;373(19):1803-13.

Overman M et al. **Nivolumab ± ipilimumab in treatment (tx) of patients (pts) with metastatic colorectal cancer (mCRC) with and without high microsatellite instability (MSI-H): CheckMate-142 interim results.** *Proc ASCO* 2016;**Abstract 3501**.

Powles T et al. **Updated efficacy and tolerability of durvalumab in locally advanced or metastatic urothelial carcinoma.** Genitourinary Cancers Symposium 2017;**Abstract 286**.

Powles T et al. **A phase 3 study of first-line durvalumab (MEDI4736) ± tremelimumab versus standard of care (SoC) chemotherapy (CT) in patients (pts) with unresectable stage IV urothelial bladder cancer (UBC): DANUBE.** *Proc ASCO* 2016;**Abstract TPS4574**.

Reck M et al. **Pembrolizumab versus chemotherapy for PD-L1-positive non-small-cell lung cancer.** *N Engl J Med* 2016;375(19):1823-33.

Select Publications

Rosenberg JE et al. **Atezolizumab in patients with locally advanced and metastatic urothelial carcinoma who have progressed following treatment with platinum-based chemotherapy: A single-arm, multicentre, phase 2 trial.** *Lancet* 2016;387(10031):1909-20.

Sharma P et al. **Nivolumab in metastatic urothelial carcinoma after platinum therapy (CheckMate 275): A multicentre, single-arm, phase 2 trial.** *Lancet Oncol* 2017;18(3):312-22.

Sharma P et al. **Efficacy and safety of nivolumab plus ipilimumab in metastatic urothelial carcinoma: First results from the phase I/II CheckMate 032 study.** *Proc SITC* 2016;**Abstract 03**.

Timmerman J et al. **Checkmate 205 update with minimum 12-month follow up: A phase 2 study of nivolumab in patients with relapsed/refractory classical Hodgkin lymphoma.** *Proc ASH* 2016;**Abstract 1110**.

Villadolid J, Amin A. **Immune checkpoint inhibitors in clinical practice: Update on management of immune-related toxicities.** *Transl Lung Cancer Res* 2015;4(5):560-75.

Wolchok J et al. **Updated results from a phase III trial of nivolumab (NIVO) combined with ipilimumab (IPI) in treatment-naive patients (pts) with advanced melanoma (MEL) (CheckMate 067).** *Proc ASCO* 2016;**Abstract 9505**.

Younes A et al. **Checkmate 205: Nivolumab (nivo) in classical Hodgkin lymphoma (cHL) after autologous stem cell transplant (ASCT) and brentuximab vedotin (BV) — A phase 2 study.** *Proc ASCO* 2016;**Abstract 7535**.