Challenging Cases in Lung Cancer

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

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 lung cancer.

OVERVIEW OF ACTIVITY

Lung cancer is a devastating disease with broad-reaching impact on public health that accounts for 15% of all new cancer cases in the United States and the most cancer-related deaths among both men and women. In 2014 in the United States alone it is estimated that the disease will culminate in 224,210 new cases and 159,260 deaths. Only 16% of all patients with lung cancer are alive 5 years or more after diagnosis, despite currently available therapies. Among the 15% of lung cancer cases diagnosed as early, localized disease, 5-year survival rates increase to approximately 53%. Thus, early detection and treatment of lung cancer remain important issues to researchers and clinicians alike, and oncology nurses play an integral role in the successful delivery of systemic anticancer therapy and in the maintenance of patient physical and psychosocial well-being.

These video proceedings from the fourth part of a 6-part integrated CNE curriculum originally held at the 2014 ONS Annual Congress feature discussions with leading lung cancer 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 lung cancer.

LEARNING OBJECTIVES

- Discuss the benefits and risks associated with systemic treatments used in the evidence-based treatment of metastatic non-small cell lung cancer (NSCLC), including chemotherapeutic agents and targeted biologic therapies.
- Communicate the clinical relevance of gene mutations and tumor histology to patients with NSCLC.
- Appreciate the recent FDA approvals of nanoparticle albumin-bound (*nab*) paclitaxel and afatinib for the management of NSCLC, and effectively integrate these agents into current treatment algorithms.
- Explain the relative risk of treatment-induced side effects to patients with NSCLC who are eligible to receive chemotherapy and bevacizumab.
- Educate patients receiving EGFR inhibitors about preventive and emergent strategies to reduce or ameliorate dermatotoxicity.
- Identify opportunities to enhance the collaborative role of oncology nurses in the comprehensive biopsychosocial care of patients with advanced NSCLC to improve clinical and quality-of-life outcomes.

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 1.7 contact hours is provided by Research To Practice during the period of August 2014 through August 2015.

FOR SUCCESSFUL COMPLETION

This is a video CNE program. To receive credit, participants should read the learning objectives and faculty disclosures, watch the video and complete the Post-test and Educational Assessment and Credit Form located at ResearchToPractice.com/ONSLung2014/CNE. A statement of credit will be issued only upon receipt of a completed Post-test with a score of 75% or better and a completed Educational Assessment and Credit Form.

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 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:

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No real or apparent conflicts of interest to disclose.

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, AstraZeneca Pharmaceuticals LP, Aveo Pharmaceuticals, Bayer HealthCare Pharmaceuticals, Biodesix Inc, Biogen Idec, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Celgene Corporation, Daiichi Sankyo Inc, Dendreon Corporation, Eisai Inc, Exelixis Inc, Genentech BioOncology, Genomic Health Inc, Gilead Sciences Inc, Incyte Corporation, Lilly, Medivation Inc, Merck, Millennium: The Takeda Oncology Company, Novartis Pharmaceuticals Corporation, Novocure, Onyx Pharmaceuticals Inc, Prometheus Laboratories Inc, Regeneron Pharmaceuticals, Sanofi, Seattle Genetics, Spectrum Pharmaceuticals Inc, Teva Oncology and VisionGate 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

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

Select Publications

Bergethon K et al. **ROS1 rearrangements define a unique molecular class of lung cancers.** *J Clin Oncol* 2012;30(8):863-70.

Fukuoka M et al. **Biomarker analyses and final overall survival results from a phase III, randomized, open-label, first-line study of gefitinib versus carboplatin/paclitaxel in clinically selected patients with advanced non-small-cell lung cancer in Asia (IPASS).** *J Clin Oncol* 2011;29(21):2866-74.

Giaccone G. **Discussion: Inhibition of immune checkpoint programmed death protein-1 (PD-1) in NSCLC.** *Proc ASCO* 2012.

Janjigian YY et al. **Activity of afatinib/cetuximab in patients (pts) with EGFR mutant non-small cell lung cancer (NSCLC) and acquired resistance (AR) to EGFR inhibitors.** *Proc ESMO* 2012;**Abstract 1227O**.

Kim DW et al. **Results of a global phase II study with crizotinib in advanced ALK-positive non-small cell lung cancer (NSCLC).** *Proc ASCO* 2012;**Abstract 7533**.

Kris MG et al. **Using multiplexed assays of oncogenic drivers in lung cancers to select targeted drugs.** *JAMA* 2014;311(19):1998-2006.

Li D et al. BIBW2992, an irreversible EGFR/HER2 inhibitor highly effective in preclinical lung cancer models. *Oncogene* 2008;27:4702-11.

Maemondo M et al. **Gefitinib or chemotherapy for non-small-cell lung cancer with mutated EGFR.** *N Engl J Med* 2010;362(25):2380-8.

Miller VA et al. **Afatinib versus placebo for patients with advanced, metastatic non-small-cell lung cancer after failure of erlotinib, gefitinib, or both, and one or two lines of chemotherapy (LUX-Lung 1): A phase 2b/3 randomised trial.** *Lancet Oncol* 2012;13(5):528-38. Abstract

Mok TS et al. **Gefitinib or carboplatin-paclitaxel in pulmonary adenocarcinoma.** *N Engl J Med* 2009;361(10):947-57.

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Patel JD et al. **PointBreak: A randomized phase III study of pemetrexed plus carboplatin and bevacizumab followed by maintenance pemetrexed and bevacizumab versus paclitaxel plus carboplatin and bevacizumab followed by maintenance bevacizumab in patients with stage IIIB or IV nonsquamous non-small-cell lung cancer.** *J Clin Oncol* 2013;31(34):4349-57.

Randomized phase III study of maintenance therapy with bevacizumab, pemetrexed, or a combination of bevacizumab and pemetrexed following carboplatin, paclitaxel and bevacizumab for advanced non-squamous NSCLC. NCT01107626

Ricciardi S et al. **Toxicity of targeted therapy in non-small-cell lung cancer management.** *Clin Lung Cancer* 2009;10(1):28-35.

Rosell R et al. **Erlotinib versus standard chemotherapy as first-line treatment for European patients with advanced EGFR mutation-positive non-small-cell lung cancer (EURTAC): A multicentre, open-label, randomised phase 3 trial.** *Lancet Oncol* 2012;13(3):239-46.

Saif MW et al. **Erlotinib-induced skin rash. Pathogenesis, clinical significance and management in pancreatic cancer patients.** *JOP* 2008;9(3):267-74.

Sandler A et al. **Paclitaxel-carboplatin alone or with bevacizumab for non-small-cell lung cancer.** *N Engl J Med* 2006;355(24):2542-50.

Sequist LV et al. **Phase III study of afatinib or cisplatin plus pemetrexed in patients with metastatic lung adenocarcinoma with EGFR mutations.** *J Clin Oncol* 2013;31(27):3327-34.

Shaw AT et al. **Ceritinib in ALK-rearranged non-small-cell lung cancer.** *N Engl J Med* 2014;370(13):1189-97.

Socinski MA et al. **Safety and efficacy of weekly *nab*®-paclitaxel in combination with carboplatin as first-line therapy in elderly patients with advanced non-small-cell lung cancer.** *Ann Oncol* 2013;24(2):314-21.

Socinski MA et al. **Weekly *nab*-paclitaxel in combination with carboplatin versus solvent-based paclitaxel plus carboplatin as first-line therapy in patients with advanced non-small-cell lung cancer: Final results of a phase III trial.** *J Clin Oncol* 2012;30(17):2055-62.

Socinski MA et al. **Results of a randomized, phase III trial of *nab*-paclitaxel (*nab*-P) and carboplatin (C) compared with Cremophor-based paclitaxel (P) and carboplatin as first-line therapy in advanced non-small cell lung cancer (NSCLC).** *Proc ASCO* 2010;**Abstract 7511**.

Soda M et al. **Identification of the transforming EML4-ALK fusion gene in non-small-cell lung cancer.** *Nature* 2007;448(7153):561-6.

Select Publications

Soria JC et al. **First-in-human evaluation of CO-1686, an irreversible, highly selective tyrosine kinase inhibitor of mutations of EGFR (activating and T790M).** *Proc WCLC* 2013;**Abstract O03.06**.

Spigel DR et al. **Clinical activity, safety, and biomarkers of MPDL3280A, an engineered PD-L1 antibody in patients with locally advanced or metastatic non-small cell lung cancer.** *Proc ASCO* 2013;**Abstract 8008**.

Takeuchi K et al. **RET, ROS1 and ALK fusions in lung cancer.** *Nat Med* 2012;18(3):378-81.

Topalian SL et al. **Safety, activity, and immune correlates of anti-PD-1 antibody in cancer.** *N Engl J Med* 2012;366(26):2443-54.

US Food and Drug Administration. **FDA approves Zykadia for late-stage lung cancer** [press release]. April 29, 2014. Available at: **http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm395299.htm**

Yang JC et al. **LUX-Lung 3: A randomized, open-label, phase III study of afatinib versus pemetrexed and cisplatin as first-line treatment for patients with advanced adenocarcinoma of the lung harboring EGFR-activating mutations.** *Proc ASCO* 2012;**Abstract LBA7500**.

Zhou C et al. **Overall survival (OS) results from OPTIMAL (CTONG0802), a phase III trial of erlotinib (E) versus carboplatin plus gemcitabine (GC) as first-line treatment for Chinese patients with EGFR mutation-positive advanced non-small cell lung cancer (NSCLC).** *Proc ASCO* 2012;**Abstract 7520**.

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