Oncology Nursing Update
Lung Cancer Edition
Issue 1, 2017 (Video Program)

CME Information

OVERVIEW OF ACTIVITY

Traditionally, chemotherapy, surgery and radiation therapy have had a modest effect on long-term outcomes for patients with lung cancer. However, the advent of biologic agents and immunotherapies has led to recent improvements in disease-free and overall survival in select patient populations. Importantly, published results from ongoing clinical trials lead to the continual emergence of new therapeutic agents and changes in the use of existing treatments. To provide oncology nurses with therapeutic strategies to address the disparate needs of patients with lung cancer, this issue of *Oncology Nursing Update* uses one-on-one interviews with medical oncologists and nurses who are experts in the field. Upon completion of this CNE activity, oncology nurses should be able to formulate an up-to-date and more complete approach to the care of patients with lung cancer.

PURPOSE STATEMENT

To present the most current recent research developments and to provide the perspectives of nurse practitioners and clinical investigators on the diagnosis and treatment of lung cancer.

LEARNING OBJECTIVES

- Discuss the benefits and risks associated with systemic therapies used in the evidence-based treatment of lung cancer, including chemotherapy regimens, targeted biologic treatments and immunotherapeutic approaches.
- Communicate the clinical relevance of tumor histology and commonly identified genetic abnormalities to patients with non-small cell lung cancer.
- Educate patients receiving EGFR and ALK inhibitors about potential side effects, and provide preventive and emergent strategies to reduce or ameliorate these toxicities.
- Develop an understanding of the mechanism of action, efficacy and safety/toxicities of anti-PD-1 checkpoint inhibitors to enable their appropriate integration into routine clinical practice.

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 2.25 contact hours is provided by Research To Practice during the period of September 2017 through September 2018.

This activity is awarded 2.25 ANCC pharmacotherapeutic contact hours.

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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/ONULung117/Video/ILNA**.

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FOR SUCCESSFUL COMPLETION

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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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No relevant conflicts of interest to disclose.

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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: September 2017

Expiration date: September 2018

Select Publications

Barlesi F et al. **Atezolizumab versus docetaxel in patients with previously treated non-small-cell lung cancer (OAK): A phase 3, open-label, multicentre randomised controlled trial.** *Lancet* 2017;389(10066):255-65.

Borghaei H et al. **Nivolumab versus docetaxel in advanced nonsquamous non-small-cell lung cancer.** *N Engl J Med* 2015;373(17):1627-39.

Brahmer J et al. **Nivolumab versus docetaxel in advanced squamous-cell non-small-cell lung cancer.** *N Engl J Med* 2015;373(2):123-35.

Drilon AE et al. **Efficacy and safety of crizotinib in patients (pts) with advanced MET exon 14-altered non-small cell lung cancer (NSCLC).** *Proc ASCO* 2016;**Abstract 108**.

Drilon A et al. **Broad, hybrid capture-based next-generation sequencing identifies actionable genomic alterations in lung adenocarcinomas otherwise negative for such alterations by other genomic testing approaches.** *Clin Cancer Res* 2015;21(16):3631-9.

Gainor JF et al. **EGFR mutations and ALK rearrangements are associated with low response rates to PD-1 pathway blockade in non-small cell lung cancer: A retrospective analysis.** *Clin Cancer Res* 2016;22(18):4585-93.

Gettinger S et al. **Nivolumab (NIVO) safety profile: Summary of findings from trials in patients (pts) with advanced squamous (SQ) non-small cell lung cancer (NSCLC).** *Proc ESMO* 2015;**Abstract 3094**.

Goss G et al. **Osimertinib for pretreated EGFR Thr790Met-positive advanced non-small-cell lung cancer (AURA2): A multi-centre, open-label, single-arm, phase 2 study.** *Lancet Oncol* 2016;17(12):1643-52.

Gu F et al. **Platinum-based adjuvant chemotherapy (ACT) in elderly patients with non-small cell lung cancer (NSCLC) in the SEER-Medicare database: Comparison between carboplatin- and cisplatin-based regimens.** *Proc ASCO* 2011;**Abstract 7014**.

Hellmann MD et al. **Nivolumab plus ipilimumab as first-line treatment for advanced non-small-cell lung cancer (CheckMate 012): Results of an open-label, phase 1, multicohort study.** *Lancet Oncol* 2017;18(1):31-41.

Herbst RS et al. **Pembrolizumab versus docetaxel for previously treated, PD-L1-positive, advanced non-small-cell lung cancer (KEYNOTE-010): A randomised controlled trial.** *Lancet* 2016;387(10027):1540-50.

Hida T et al. **Alectinib versus crizotinib in patients with ALK-positive non-small-cell lung cancer (J-ALEX): An open-label, randomised phase 3 trial.** *Lancet* 2017;[Epub ahead of print].

Jia Y et al. **Overcoming EGFR(T790M) and EGFR(C797S) resistance with mutant-selective allosteric inhibitors.** *Nature* 2016;534(7605):129-32.

Langer C 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.

Mok TS et al; AURA3 Investigators. **Osimertinib or platinum-pemetrexed in EGFR T790M-positive lung cancer.** *N Engl J Med* 2017;376(7):629-40.

Nokihara H et al. **Alectinib (ALC) versus crizotinib (CRZ) in ALK-inhibitor naive *ALK*-positive non-small cell lung cancer (*ALK+* NSCLC): Primary results from the J-ALEX study.** *Proc ASCO* 2016;**Abstract 9008**.

Oxnard GR et al. **Association between plasma genotyping and outcomes of treatment with osimertinib (AZD9291) in advanced non-small-cell lung cancer.** *J Clin Oncol* 2016;34(28):3375-82.

Park K et al. **Afatinib versus gefitinib as first-line treatment of patients with EGFR mutation-positive non-small-cell lung cancer (LUX-Lung 7): A phase 2B, open-label, randomised controlled trial.** *Lancet Oncol* 2016;17(5):577-89.

Peters S et al. **Alectinib versus crizotinib in untreated ALK-positive non-small-cell lung cancer.** *N Engl J Med* 2017;[Epub ahead of print].

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.

Sequist LV et al. **Osimertinib responses after disease progression in patients who had been receiving rociletinib.** *JAMA Oncol* 2016;2(4):541-3.

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

Soria JC et al. **Gefitinib plus chemotherapy versus placebo plus chemotherapy in EGFR-mutation-positive non-small-cell lung cancer after progression on first-line gefitinib (IMPRESS): A phase 3 randomised trial.** *Lancet Oncol* 2015;16(8):990-8.

Select Publications

Wakelee HA et al. **E1505: Adjuvant chemotherapy +/- bevacizumab for early stage NSCLC — Outcomes based on chemotherapy subsets.** *Proc ASCO* 2016;**Abstract 8507**.

Yang JC et al. **Afatinib versus cisplatin-based chemotherapy for EGFR mutation-positive lung adenocarcinoma (LUX-Lung 3 and LUX-Lung 6): Analysis of overall survival data from two randomised, phase 3 trials.** *Lancet Oncol* 2015;16(2):141-51.