Lung Cancer Update

Issue 3, 2016 (Video Program)

CME Information

TARGET AUDIENCE

This activity is intended for medical oncologists, radiation oncologists and other healthcare providers involved in the treatment of lung cancer.

OVERVIEW OF ACTIVITY

Lung cancer is the leading cause of cancer mortality in the United States for both men and women. In 2017, it is estimated that 222,500 new cases of lung and bronchus cancer will be diagnosed and 155,870 deaths will occur in the United States. Traditional chemotherapy, surgery and radiation therapy have had a modest effect on long-term outcomes for patients with lung cancer. However, the advent of biologic and immunotherapeutic agents has led to recent improvements in disease-free and overall survival in select populations. In order to offer optimal patient care, including the option of clinical trial participation, clinicians must be well informed of these advances.

To provide clinicians with therapeutic strategies to address the disparate needs of patients with lung cancer, this program features information on the latest research developments and is designed to assist medical and radiation oncologists with the formulation of up-to-date strategies for the care of patients with lung cancer.

LEARNING OBJECTIVES

- Describe existing and emerging data on the efficacy and safety of tumor immunotherapy, including approaches directed at the PD-1 and PD-L1 pathways, and of antibody-drug conjugates in lung cancer and mesothelioma, and consider this information when counseling patients regarding protocol and clinical treatment options.
- Consider published safety and efficacy data with available and emerging therapeutic strategies, and appropriately incorporate targeted therapies into the care of patients with identified tumor driver mutations or alterations.
- Recognize the recent FDA approvals of ramucirumab and necitumumab for patients with metastatic non-small cell lung cancer (NSCLC), and discern how these agents can be safely administered to appropriate patients with squamous and nonsquamous disease.
- Compare and contrast the variable CNS permeability of approved ALK inhibitors, and use this information to guide selection of appropriate treatment for patients with ALK-positive NSCLC and brain metastases.
- Recall the scientific rationale for ongoing investigation of novel agents or therapeutic approaches in NSCLC, and counsel appropriately selected patients about study participation.

ACCREDITATION STATEMENT

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Successful completion of this CME activity enables the participant to earn up to 1.75 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

Please note, this program has been specifically designed for the following ABIM specialty: **medical oncology**.

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This CME activity consists of a video component. To receive credit, the participant should 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/LCU316/Video/CME.

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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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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

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Select Publications

Blumenschein GR et al. **Phase I study of anti-mesothelin antibody drug conjugate anetumab ravtansine (AR).** *Proc ASCO* 2016;**Abstract 2509**.

Gomez DR et al. **Local consolidative therapy versus maintenance therapy or observation for patients with oligometastatic non-small-cell lung cancer without progression after first-line systemic therapy: A multicentre, randomised, controlled, phase 2 study.** *Lancet Oncol* 2016;17(12):1672-82.

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.

Hassan R et al. **A pivotal randomized phase II study of anetumab ravtansine or vinorelbine in patients with advanced or metastatic pleural mesothelioma after progression on platinum/pemetrexed-based chemotherapy (NCT02610140).** *Proc ASCO* 2016;**Abstract TPS8576**.

Hassan R et al. **Avelumab (MSB0010718C; anti-PD-L1) in patients with advanced unresectable mesothelioma from the JAVELIN solid tumor phase Ib trial: Safety, clinical activity, and PD-L1 expression.** *Proc ASCO* 2016;**Abstract 8503**.

Jänne PA et al. **AZD9291 in EGFR inhibitor-resistant non-small-cell lung cancer.** *N Engl J Med* 2015;372(18):1689-99.

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

Mok TS et al, on behalf of the AURA3 Investigators. **Osimertinib or platinum-pemetrexed in EGFR T790M-positive lung cancer.** *N Engl J Med* 2016;[Epub ahead of print].

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.

Park K. et al. **BI 1482694 (HM61713), an EGFR mutant-specific inhibitor, in T790M+ NSCLC: Efficacy and safety at the RP2D.** *Proc ASCO* 2016;**Abstract 9055**.

Rossi A. **Rovalpituzumab tesirine and DLL3: A new challenge for small-cell lung cancer.** *Lancet Oncol* 2017;18(1):3-5.

Rudin CM et al. **Rovalpituzumab tesirine, a DLL3-targeted antibody-drug conjugate, in recurrent small-cell lung cancer: A first-in-human, first-in-class, open-label, phase 1 study.** *Lancet Oncol* 2017;18(1):42-51.

Rudin CM et al. **Safety and efficacy of single-agent rovalpituzumab tesirine (SC16LD6.5), a delta-like protein 3 (DLL3)-targeted antibody-drug conjugate (ADC) in recurrent or refractory small cell lung cancer (SCLC).** *Proc ASCO* 2016;**Abstract LBA8505**.

Senan S et al. **PROCLAIM: Randomized phase III trial of pemetrexed-cisplatin or etoposide-cisplatin plus thoracic radiation therapy followed by consolidation chemotherapy in locally advanced nonsquamous non-small-cell lung cancer.** *J Clin Oncol* 2016;34(9):953-62.

SOLAR: An open-label, randomized phase 3 efficacy study of ASP8273 vs erlotinib or gefitinib in first-line treatment of patients with stage IIIB/IV non-small cell lung cancer tumors with EGFR activating mutations. NCT02588261

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.

SWOG-S1400 (Lung-MAP): Biomarker-targeted second-line therapy in treating patients with recurrent stage IV squamous cell lung cancer. NCT02154490

Tan DS et al. **Cancer genomics: Diversity and disparity across ethnicity and geography.** *J Clin Oncol* 2016;34(1):91-101.

Tong JH et al. **MET amplification and exon 14 splice site mutation define unique molecular subgroups of non-small cell lung carcinoma with poor prognosis.** *Clin Cancer Res* 2016;22(12):3048-56.

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

Yu HA et al. **Antitumor activity of ASP8273 300 mg in subjects with EGFR mutation-positive non-small cell lung cancer: Interim results from an ongoing phase 1 study.** *Proc ASCO* 2016;**Abstract 9050**.

Zalcman G et al. **Bevacizumab 15mg/kg plus cisplatin-pemetrexed (CP) triplet versus CP doublet in malignant pleural mesothelioma (MPM): Results of the IFCT-GFPC-0701 MAPS randomized phase 3 trial.** *Proc ASCO* 2015;**Abstract 7500**.