

Point-Counterpoint:

Investigators Discuss and Debate Clinical Questions and Controversies in Non-Small Cell Lung Cancer

CME Information

TARGET AUDIENCE

This program is intended for medical oncologists, hematology-oncology fellows and other allied healthcare professionals involved in the treatment of non-small cell lung cancer (NSCLC).

OVERVIEW OF ACTIVITY

Lung cancer is a devastating disease with a broad impact on public health: In the year 2017 it is estimated that 222,500 individuals will be diagnosed and 155,870 will die of the disease in the United States alone. A major focus of recent lung cancer research has been the development of molecular-targeted agents and the identification of biomarkers to help guide treatment selection for individuals who harbor specific oncogenic alterations. This and a number of subsequent drug approvals have created a paradigm shift in the way patients with advanced NSCLC are initially stratified and counseled, moving from a “one-size-fits-all” approach to a customized, biomarker-driven treatment algorithm. In addition, deeper insights into how to harness the body’s immune system are now being applied to the management of this lethal disease, stemming from an improved understanding of the mechanism of tumor immune response and its evasion by certain cancers. The advent of these treatment options presents new promise of efficacy and safety for patients with lung cancer but also poses a challenge to oncologists and their support staff in appropriately selecting individuals who may benefit from specific agents and in determining how to integrate these therapies into standard treatment algorithms.

These video proceedings from a CME symposium held during the 2017 ASCO Annual Meeting feature renowned lung cancer clinical investigators weighing in on challenging questions and cases from a panel of community-based general oncologists and reviewing relevant data. By providing information on the latest research developments and their potential application to routine practice, this activity is designed not only to improve clinicians’ knowledge of the rapidly evolving oncology treatment landscape but also to provide them with practical perspectives to help them become better and more effective caregivers.

LEARNING OBJECTIVES

- Design evidence-based strategies for the management of localized and locally advanced NSCLC, considering the potential contributions of systemic and local therapeutic modalities.
- Compare and contrast expert perspectives on the indications for mutation and/or PD-L1 analysis for patients with localized and metastatic NSCLC, and, when appropriate, use validated testing platforms to obtain this information.
- Review recent FDA approvals and available research data documenting the safety and efficacy of pembrolizumab alone or in combination with carboplatin/pemetrexed for patients with previously untreated metastatic NSCLC, and use this information to appropriately integrate the use of pembrolizumab into this setting.
- Consider age, performance status and other patient- or disease-related factors to guide the selection of first-line therapy for patients with newly diagnosed metastatic squamous and nonsquamous NSCLC without an identifiable driver mutation.
- Appreciate available clinical trial data documenting the efficacy of necitumumab and ramucirumab in metastatic NSCLC, and discern how these agents can be optimally integrated into clinical practice for patients with PD-L1-positive and PD-L1-negative squamous and nonsquamous disease.
- Educate patients about the side effects associated with recently approved novel agents and immunotherapeutic approaches, and provide preventive strategies to reduce or ameliorate these toxicities.
- Consider published safety and efficacy data with available and emerging targeted therapeutic strategies, and appropriately incorporate these therapies into the care of patients with identified tumor driver mutations or alterations.
- Recall the scientific rationale for ongoing investigation of novel agents or therapeutic approaches in NSCLC, and counsel appropriately selected patients about study participation.

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

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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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This activity is supported by an educational grant from Lilly.

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 2017

Expiration date: August 2018

Select Publications

Corey J Langer, MD

Barlesi F et al. **Primary analysis from OAK, a randomized phase III study comparing atezolizumab with docetaxel in 2L/3L NSCLC.** *Proc ESMO 2016*;Abstract LBA44_PR.

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.

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.

Hui R et al. **Long-term OS for patients with advanced NSCLC enrolled in the KEYNOTE-001 study of pembrolizumab (pembro).** *Proc ASCO 2016*;Abstract 9026.

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.

Ramaswamy Govindan, MD

Garon EB et al. **Ramucirumab plus docetaxel versus placebo plus docetaxel for second-line treatment of stage IV non-small-cell lung cancer after disease progression on platinum-based therapy (REVEL): A multicentre, double-blind, randomised phase 3 trial.** *Lancet* 2014;384(9944):665-73.

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.

Pérol M et al. **Quality of life results from the phase 3 REVEL randomized clinical trial of ramucirumab-plus-docetaxel versus placebo-plus-docetaxel in advanced/metastatic non-small cell lung cancer patients with progression after platinum-based chemotherapy.** *Lung Cancer* 2016;93:95-103.

Reck M et al. **The effect of necitumumab in combination with gemcitabine plus cisplatin on tolerability and on quality of life: Results from the phase 3 SQUIRE trial.** *J Thorac Oncol* 2016;11(6):808-18.

Socinski MA. **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.

Thatcher N et al. **Necitumumab plus gemcitabine and cisplatin versus gemcitabine and cisplatin alone as first-line therapy in patients with stage IV squamous non-small-cell lung cancer (SQUIRE): An open-label, randomised, controlled phase 3 trial.** *Lancet Oncol* 2015;16(7):763-74.

Gregory J Riely, MD, PhD

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].

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

Rosell R et al. **Screening for epidermal growth factor receptor mutations in lung cancer.** *N Engl J Med* 2009;361(10):958-67.

Soria JC et al. **First-line ceritinib versus platinum-based chemotherapy in advanced ALK-rearranged non-small-cell lung cancer (ASCEND-4): A randomised, open-label, phase 3 study.** *Lancet* 2017;389(10072):917-29.

Yu HA et al. **Analysis of tumor specimens at the time of acquired resistance to EGFR-TKI therapy in 155 patients with EGFR-mutant lung cancers.** *Clin Cancer Res* 2013;19(8):2240-7.

Leora Horn, MD, MSc

Mountain CF. **Revisions in the international system for staging lung cancer.** *Chest* 1997;111(6):1710-7.

Non-small Cell Lung Cancer Collaborative Group. **Chemotherapy in non-small cell lung cancer: A meta-analysis using updated data on individual patients from 52 randomised clinical trials.** *BMJ* 1995;311(7010):899-909.

Pignon JP et al. **Lung adjuvant cisplatin evaluation: A pooled analysis by the LACE Collaborative Group.** *J Clin Oncol* 2008;26(21):3552-9.

Select Publications

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.

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

Jean-Charles Soria, MD, PhD

A randomized phase II/III trial of afatinib plus cetuximab versus afatinib alone in treatment-naïve patients with advanced, EGFR mutation positive non-small cell lung cancer (NSCLC). NCT02438722

An open-label, randomized phase 3 trial of nivolumab, or nivolumab plus ipilimumab, or nivolumab plus platinum doublet chemotherapy versus platinum doublet chemotherapy in subjects with chemotherapy-naïve stage IV or recurrent non-small cell lung cancer (NSCLC). NCT02477826

ARCHER 1050: A randomized, open label phase 3 efficacy and safety study of dacomitinib (PF-00299804) vs gefitinib for the first-line treatment of locally advanced or metastatic NSCLC in subjects with EGFR activating mutations. NCT01774721

Goldman JW et al. **Treatment rationale and study design for the JUNIPER study: A randomized phase III study of abemaciclib with best supportive care versus erlotinib with best supportive care in patients with stage IV non-small-cell lung cancer with a detectable KRAS mutation whose disease has progressed after platinum-based chemotherapy.** *Clin Lung Cancer* 2016;17(1):80-4.

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.

JUNIPER: A randomized phase 3 study of abemaciclib plus best supportive care versus erlotinib plus best supportive care in patients with stage IV NSCLC with a detectable KRAS mutation who have progressed after platinum-based chemotherapy. NCT02152631

Li B et al. **Ado-trastuzumab emtansine in patients with HER2 mutant lung cancers: Results from a phase II basket trial.** *Proc ASCO* 2017;Abstract 8510.

Sabari JK et al. **PD-L1 expression and response to immunotherapy in patients with MET exon 14-altered non-small cell lung cancers (NSCLC).** *Proc ASCO* 2017;Abstract 8512.

Stinchcombe T et al. **Efficacy, safety, and biomarker results of trastuzumab emtansine (T-DM1) in patients (pts) with previously treated HER2-overexpressing locally advanced or metastatic non-small cell lung cancer (mNSCLC).** *Proc ASCO* 2017;Abstract 8509.