Cases from the Community

Clinical Investigators Provide Their Perspectives on Emerging Research and Actual Patients with Non-Small Cell Lung Cancer

A Special Audio Supplement

CME Information

TARGET AUDIENCE

This activity is intended for hematologists, medical oncologists and other healthcare providers involved in the treatment of non-small cell lung cancer (NSCLC).

OVERVIEW OF ACTIVITY

Lung cancer is a devastating disease with broad-reaching effects on public health as it accounts for 14% of all new cancer cases in the United States and the most cancer-related deaths among both men and women. In the year 2018, it is estimated that approximately 234,030 individuals will be diagnosed and 154,050 will die from the disease. Despite many advances over the past few decades related to surgery, radiation therapy and chemotherapy, death rates attributable to lung cancer have remained relatively unchanged. Today, however, hope is renewed that these patterns have started to change as recent research advances have led to an explosion in lung cancer genetic and biologic knowledge among scientists and clinicians. Over the past several years, major clinical trials in NSCLC have recorded a host of promising successes, many of which are already being applied in clinical practice. Even so, these achievements will doubtless continue to be dissected in the upcoming years and will further challenge the collective understanding of the biology and optimal management of this disease.

This CME program was developed from the proceedings of a satellite symposium held during the 2018 ASCO Annual Meeting. It explores the most significant therapeutic advances in the field of NSCLC by using the perspectives of leading lung cancer experts on challenging cases and questions submitted by community oncologists to frame a discussion of how this information has aided in the refinement of current clinical practice and ongoing research. This activity will help medical oncologists and other allied healthcare professionals to find answers to the individualized questions and concerns they frequently encounter and to in turn provide high-quality cancer care.

LEARNING OBJECTIVES

- Use patient and disease variables in addition to published research data to guide the selection of therapy for patients with EGFR, ALK, ROS1 and BRAF mutation-positive NSCLC.
- Recall available Phase III data documenting the benefit of sequential anti-PD-L1 therapy after completion of chemoradiation therapy for patients with Stage III NSCLC, and consider the role of durvalumab for appropriate patients.
- Appreciate the recent FDA approval of osimertinib as first-line therapy for patients with EGFR mutation-positive NSCLC, and integrate osimertinib into the clinical management of this disease.
- Appraise emerging research data evaluating anti-PD-1/PD-L1 antibodies as monotherapy or in combination with other systemic approaches for patients with metastatic NSCLC.
- Educate patients about the side effects associated with immune checkpoint inhibitors, and provide preventive strategies to reduce or ameliorate these toxicities.

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Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 1 Medical Knowledge MOC point 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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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 11 or later, Firefox 56 or later, Chrome 61 or later, Safari 11 or later, Opera 48 or later
Adobe Flash Player 27 plug-in or later
Adobe Acrobat Reader
(Optional) Sound card and speakers for audio

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Select Publications

Antonia SJ et al. **Durvalumab after chemoradiotherapy in stage III non-small-cell lung cancer.** *N Engl J Med* 2017;377(20):1919-29.

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Bradley JD et al. **Standard-dose versus high-dose conformal radiotherapy with concurrent and consolidation carboplatin plus paclitaxel with or without cetuximab for patients with stage IIIA or IIIB non-small-cell lung cancer (RTOG 0617): A randomised, two-by-two factorial phase 3 study.** *Lancet Oncol* 2015;16(2):187-99.

Camidge DR et al. **Exploratory analysis of brigatinib activity in patients with anaplastic lymphoma kinase-positive non-small-cell lung cancer and brain metastases in two clinical trials.** *J Clin Oncol* 2018;[Epub ahead of print].

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Deng L et al. **Irradiation and anti-PD-L1 treatment synergistically promote antitumor immunity in mice.** *J Clin Invest* 2014;124(2):687-95.

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.

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Jordan EJ et al. **Prospective comprehensive molecular characterization of lung adenocarcinomas for efficient patient matching to approved and emerging therapies.** *Cancer Discov* 2017;7(6):596-609.

Karasarides M et al. **BRAF is a therapeutic target in melanoma.** *Oncogene* 2004;23(37):6292-8.

Kim DW et al. **Brigatinib in patients with crizotinib-refractory anaplastic lymphoma kinase-positive non-small-cell lung cancer: A randomized, multicenter phase II trial.** *J Clin Oncol* 2017;35(22):2490-8.

Konduri K et al. **EGFR fusions as novel therapeutic targets in lung cancer.** *Cancer Discov* 2016;6(6):601-11.

Lim SM et al. **Open-label, multicenter, phase II study of ceritinib in patients with non-small-cell lung cancer harboring ROS1 rearrangement.** *J Clin Oncol* 2017;35(23):2613-8.

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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.

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