Lung Cancer Update Issue 2, 2018 (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

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 diseasefree 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. Featuring information on the latest research developments, this program 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

- Compare and contrast the mechanisms of action, efficacy and safety/toxicity of approved and investigational anti-PD-1/PD-L1 antibodies for the treatment of lung cancer to determine the current and/or potential utility of each in clinical practice.
- Appreciate the FDA approval of durvalumab and available Phase III data documenting the benefit of sequential anti-PD-L1 therapy after the completion of chemoradiation therapy for Stage III non-small cell lung cancer (NSCLC), and consider the role of this therapeutic approach for appropriate patients.
- Develop a genomic testing algorithm to assist in identifying appropriate patients eligible for protocol and clinical targeted 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.
- Devise an evidence-based approach to the selection of systemic therapy for patients with NSCLC without an identified targetable mutation.
- 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.

ACCREDITATION STATEMENT

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CREDIT DESIGNATION STATEMENT

Research To Practice designates this enduring material for a maximum of 2.5 *AMA PRA Category 1 Credits*TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

AMERICAN BOARD OF INTERNAL MEDICINE (ABIM) — MAINTENANCE OF CERTIFICATION (MOC)

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 2.5 Medical Knowledge 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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HOW TO USE THIS CME ACTIVITY

This CME activity consists of a video component. To receive credit, the participant should review the CME information, 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/LCU218/Video/CME**. The corresponding audio program is available as an alternative at **ResearchToPractice.com/LCU218**.

CONTENT VALIDATION AND DISCLOSURES

Research To Practice (RTP) is committed to providing its participants with high-quality, unbiased and state-of-theart education. We assess conflicts of interest with faculty, planners and managers of CME 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 physician 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:

Geoffrey R Oxnard, MD

Lowe Center for Thoracic Oncology Dana-Farber Cancer Institute Associate Professor of Medicine Harvard Medical School Boston, Massachusetts

Consulting Agreements: AstraZeneca Pharmaceuticals LP, DropWorks CEI, GRAIL Inc, Guardant Health, Ignyta Inc, Inivata, Loxo Oncology Inc.

Martin Reck, MD, PhD

Head of Department of Thoracic Oncology Head of Clinical Trial Department LungenClinic Grosshansdorf Grosshansdorf, Germany

Consulting Agreements and Contracted Research: Abbott Laboratories, AstraZeneca Pharmaceuticals LP, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Celgene Corporation, EMD Serono Inc, Lilly, Merck, Novartis, Pfizer Inc, Roche Laboratories Inc; **Speakers Bureau:** Abbott Laboratories, AstraZeneca Pharmaceuticals LP, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, EMD Serono Inc, Lilly, Merck, Pfizer Inc, Roche Laboratories 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 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

Ahn M-J et al. Entrectinib in patients with locally advanced or metastatic ROS1 fusion-positive non-small cell lung cancer (NSCLC). *Proc IASLC* 2017; Abstract OA 14.06.

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

Brahmer JR et al. Management of immune-related adverse events in patients treated with immune checkpoint inhibitor therapy: American Society of Clinical Oncology clinical practice guideline. *J Clin Oncol* 2018;36(17):1714-68.

Brahmer JR et al. The Society for Immunotherapy of Cancer consensus statement on immunotherapy for the treatment of non-small cell lung cancer (NSCLC). *J Immunother Cancer* 2018;6(1):75.

Carbone DP et al. Efficacy and safety of rovalpituzumab tesirine in patients with DLL3-expressing, \geq 3rd line small cell lung cancer: Results from the phase 2 TRINITY study. *Proc ASCO* 2018; Abstract 8507.

Drilon AE et al. A phase 1 study of LOXO-292, a potent and highly selective RET inhibitor, in patients with RET-altered cancers. *Proc ASCO* 2018; Abstract 102.

Drilon A et al. Efficacy of larotrectinib in TRK fusion-positive cancers in adults and children. *N Engl J Med* 2018;378(8):731-9.

Gandhi L et al; KEYNOTE-189 Investigators. **Pembrolizumab plus chemotherapy in metastatic non-small-cell lung cancer.** *N Engl J Med* 2018;378(22):2078-92.

Goss G et al. CNS response to osimertinib in patients with T790M-positive advanced NSCLC: Pooled data from two phase II trials. *Ann Oncol* 2018;29(3):687-93.

Hellmann MD et al. Nivolumab plus ipilimumab in lung cancer with a high tumor mutational burden. *N Engl J Med* 2018;378(22):2093-104.

Kalemkerian GP et al. Molecular testing guideline for the selection of patients with lung cancer for treatment with targeted tyrosine kinase inhibitors: American Society of Clinical Oncology endorsement of the College of American Pathologists/International Association for the Study of Lung Cancer/Association for Molecular Pathology clinical practice guideline update. *J Clin Oncol* 2018;36(9):911-9.

Lee CK et al. Patient-reported symptoms and impact of treatment with osimertinib versus chemotherapy in advanced non-small-cell lung cancer: The AURA3 trial. *J Clin Oncol* 2018;36(18):1853-60.

Lopes G et al. Pembrolizumab (pembro) versus platinum-based chemotherapy (chemo) as first-line therapy for advanced/ metastatic NSCLC with a PD-L1 tumor proportion score (TPS) \geq 1%: Open-label, phase 3 KEYNOTE-042 study. *Proc ASCO* 2018; Abstract LBA4.

Mok T et al. Dacomitinib (daco) versus gefitinib (gef) for first-line treatment of advanced NSCLC (ARCHER 1050): Final overall survival (OS) analysis. *Proc ASCO* 2018; Abstract 9004.

Nakamura A et al. Phase III study comparing gefitinib monotherapy (G) to combination therapy with gefitinib, carboplatin, and pemetrexed (GCP) for untreated patients (pts) with advanced non-small cell lung cancer (NSCLC) with EGFR mutations (NEJ009). *Proc ASCO* 2018;Abstract 9005.

Popat S. Osimertinib as first-line treatment in EGFR-mutated non-small-cell lung cancer. N Engl J Med 2018;378(2):192-3.

Ramalingam SS et al. **Osimertinib as first-line treatment of EGFR mutation-positive advanced non-small-cell lung cancer.** *J Clin Oncol* 2018;36(9):841-9.

Ramalingam S et al. Tumor mutational burden (TMB) as a biomarker for clinical benefit from dual immune checkpoint blockade with nivolumab (nivo) + ipilimumab (ipi) in first-line (1L) non-small cell lung cancer (NSCLC): Identification of TMB cutoff from CheckMate 568. *Proc AACR* 2018;Abstract CT078.

Schiller JH. A new standard of care for advanced lung cancer. N Engl J Med 2018;378(22):2135-7.

Socinski MA et al; IMpower150 Study Group. Atezolizumab for first-line treatment of metastatic nonsquamous NSCLC. *N Engl J Med* 2018;378(24):2288-301.

Soria JC et al; FLAURA Investigators. Osimertinib in untreated EGFR-mutated advanced non-small-cell lung cancer. N Engl J Med 2018;378(2):113-25.

Wu YL et al. CNS efficacy of osimertinib in patients with T790M-positive advanced non-small-cell lung cancer: Data from a randomized phase III trial (AURA3). J Clin Oncol 2018;36(26):2702-9.