Lung Cancer Update

Issue 3, 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 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. 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.
- Formulate management strategies for small cell lung cancer, considering systemic therapy in addition to current research studies evaluating novel immunotherapeutic and targeted approaches.
- 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 unresectable Stage III non-small cell lung cancer, 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.
- 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

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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/LCU318/Video/CME**. The corresponding audio program is available as an alternative at **ResearchToPractice.com/LCU318**.

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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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No relevant conflicts of interest to disclose

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Consulting Agreements: Agios Pharmaceuticals Inc, Amgen Inc, Ariad Pharmaceuticals Inc/Takeda Oncology, Array BioPharma Inc, Bristol-Myers Squibb Company, Genentech, Pfizer Inc, Theravance Biopharma; **Honoraria:** Genentech, Incyte Corporation, Merck, Novartis, Pfizer Inc, Roche Laboratories Inc.

EDITOR — **Dr Love** is president and CEO of Research To Practice. Research To Practice receives funds in the form of educational grants to develop CME activities from the following commercial interests: AbbVie Inc, Acerta Pharma — A member of the AstraZeneca Group, Adaptive Biotechnologies, Agendia Inc, Agios Pharmaceuticals Inc, Amgen Inc, Ariad Pharmaceuticals Inc, Array BioPharma Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheranostics Inc, Boehringer Ingelheim Pharmaceuticals Inc, Boston Biomedical Pharma Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Daiichi Sankyo Inc, Dendreon Pharmaceuticals Inc, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech, Genomic Health Inc, Gilead Sciences Inc, Guardant Health, Halozyme Inc, ImmunoGen Inc, Incyte Corporation, Infinity Pharmaceuticals Inc, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Kite Pharma Inc, Lexicon Pharmaceuticals Inc, Lilly, Loxo Oncology, Medivation Inc, a Pfizer Company, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, Natera Inc, Novartis, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sandoz Inc, a Novartis Division, Sanofi Genzyme, Seattle Genetics, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro Inc, Teva Oncology and Tokai Pharmaceuticals Inc.

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This activity is supported by educational grants from AstraZeneca Pharmaceuticals LP, Bristol-Myers Squibb Company, Celgene Corporation, Foundation Medicine, Genentech and Merck.

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

Release date: November 2018

Expiration date: November 2019

Select Publications

A study of carboplatin plus etoposide with or without atezolizumab in participants with untreated extensive-stage (ES) small cell lung cancer (SCLC) (IMpower133). NCT02763579

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.

Camidge DR et al. **Updated efficacy and safety data from the global phase III ALEX study of alectinib (ALC) vs crizotinib (CZ) in untreated advanced ALK+ NSCLC.** *Proc ASCO* 2018;**Abstract 9043**.

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

Chung HC et al. **Phase 2 study of pembrolizumab in advanced small-cell lung cancer (SCLC): KEYNOTE-158.** *Proc ASCO* 2018;**Abstract 8506**.

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.

Drilon A et al. **Safety and antitumor activity of the multitargeted pan-TRK, ROS1, and ALK inhibitor entrectinib: Combined results from two phase I trials (ALKA-372-001 and STARTRK-1).** *Cancer Discov* 2017;7(4):400-9.

Dudnik E et al; Israel Lung Cancer Group. **BRAF mutant lung cancer: Programmed death ligand 1 expression, tumor mutational burden, microsatellite instability status, and response to immune check-point inhibitors.** *J Thorac Oncol* 2018;13(8):1128-37.

Furuya N et al. **Phase III study comparing bevacizumab plus erlotinib to erlotinib in patients with untreated NSCLC harboring activating EGFR mutations: NEJ026.** *Proc ASCO* 2018;**Abstract 9006**.

Jiyeong Lin J et al. **Long-term efficacy and outcomes with sequential crizotinib followed by alectinib in ALK+ NSCLC.** *Proc ASCO* 2018;**Abstract 9093**.

Lin JJ et al. **Brigatinib in patients with alectinib-refractory ALK-positive non-small cell lung cancer: A retrospective study.** *J Thorac Oncol* 2018;13(10):1530-8.

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) ≥ 1%: Open-label, phase 3 KEYNOTE-042 study.** *Proc ASCO* 2018;**Abstract LBA4**.

Magnuson WJ et al. **Management of brain metastases in tyrosine kinase inhibitor-naïve epidermal growth factor receptor-mutant non-small-cell lung cancer: A retrospective multi-institutional analysis.** *J Clin Oncol* 2017;35(10):1070-7.

Mok TS et al. **Improvement in overall survival in a randomized study that compared dacomitinib with gefitinib in patients with advanced non–small cell lung cancer and EGFR activating mutations.** *J Clin Oncol* 2018;36(22):2244-50.

Paz-Ares LG et al. **Phase 3 study of carboplatin-paclitaxel/*nab*-paclitaxel (Chemo) with or without pembrolizumab (Pembro) for patients (Pts) with metastatic squamous (Sq) non-small cell lung cancer (NSCLC).** *Proc ASCO* 2018;**Abstract 105**.

Rudin CM et al; SCRX16-001 Investigators. **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.

Shaw AT et al. **Efficacy of lorlatinib in patients (pts) with advanced ALK-positive non-small cell lung cancer (NSCLC) and ALK kinase domain mutations.** *Proc AACR* 2018;**Abstract CT044**.

Shaw AT et al. **Lorlatinib in non-small-cell lung cancer with ALK or ROS1 rearrangement: An international, multicentre, open-label, single-arm first-in-man phase 1 trial.** *Lancet Oncol* 2017;18(12):1590-9.

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. **Osimertinib in untreated EGFR-mutated advanced non–small-cell lung cancer.** *N Engl J Med* 2018;378(2):113-25.

Yamamoto N et al. **Erlotinib plus bevacizumab (EB) versus erlotinib alone (E) as first-line treatment for advanced EGFR mutation–positive non-squamous non–small-cell lung cancer (NSCLC): Survival follow-up results of JO25567.** *Proc ASCO* 2018;**Abstract 9007**.