Year in Review

On Demand — Significance and Relevance of Recent Data Sets and Publications in the Management of Lung Cancer

CME Information

TARGET AUDIENCE

This program is intended for medical oncologists, hematologists, hematology-oncology fellows and other healthcare professionals 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. Published results from ongoing trials continually lead to the emergence of new therapeutic targets and regimens, thereby altering management algorithms. In order to offer optimal patient care, including the option of clinical trial participation, the practicing cancer clinician must be well informed of these advances.

To bridge the gap between research and patient care, this video program features a one-on-one discussion with leading medical oncology investigator Dr Benjamin Levy. By providing information on the year's most important presentations and publications in the context of expert perspectives, this CME activity assists medical oncologists and other allied healthcare professionals with the formulation of current, evidence-based therapeutic strategies.

LEARNING OBJECTIVES

- Compare and contrast the clinical relevance of recent pivotal lung cancer research results published in peer-reviewed journals and/or presented at major oncology conferences.
- Appraise emerging research data documenting the benefits and risks of sequential anti-PD-L1 antibody therapy for patients with unresectable Stage III non-small cell lung cancer (NSCLC) who have not experienced disease progression after standard platinum-based chemotherapy concurrent with radiation therapy.
- Review recent data on therapeutic advances related to the long-term care of patients with NSCLC and EGFR mutations, and integrate this information, as appropriate, into current clinical practice.
- Communicate to appropriate patients with NSCLC the efficacy and safety of approved and investigational ALK inhibitors, considering the predictive utility of ALK mutation testing.
- Consider age, performance status, PD-L1 tumor proportion score and other patient- or disease-related factors in the selection of induction and maintenance systemic therapy for metastatic NSCLC without an identifiable driver mutation.
- Review published and emerging research data documenting the safety and efficacy of anti-PD-1/PD-L1 antibodies used as monotherapy or in combination with chemotherapy and/or targeted therapy for newly diagnosed metastatic NSCLC.
- Formulate management strategies for small cell lung cancer, considering the contributory roles of local and systemic therapy and the potential benefits of participation in research studies evaluating novel immunotherapeutic and targeted approaches.

ACCREDITATION STATEMENT

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Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 2 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 slide and video components. To receive credit, the participant should review the CME information, view the slide presentations, 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/YiROnDemand19/Lung/CME**.

CONTENT VALIDATION AND DISCLOSURES

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FACULTY — The following faculty (and his spouse/partner) reported relevant conflicts of interest, which have been resolved through a conflict of interest resolution process:

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Advisory Committee: AstraZeneca Pharmaceuticals LP, Celgene Corporation, Genentech, Lilly, Merck, Takeda Oncology; **Consulting Agreements:** AstraZeneca Pharmaceuticals LP, Celgene Corporation; **Contracted Research:** Boehringer Ingelheim Pharmaceuticals Inc, Celgene Corporation.

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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

Last review date: January 2019

Expiration date: January 2020

Select Publications

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.

Antonia SJ et al. **Overall survival with durvalumab versus placebo after chemoradiotherapy in stage III NSCLC: Updated results from PACIFIC.** *Proc WCLC* 2018;**Abstract PL02.01**.

Arbour KC et al. **Impact of baseline steroids on efficacy of programmed cell death-1 and programmed death-ligand 1 blockade in patients with non-small-cell lung cancer.** *J Clin Oncol* 2018;36(28):2872-8.

Barlesi F et al. **IMpower132: Efficacy of atezolizumab (atezo) + carboplatin (carbo)/cisplatin (cis) + pemetrexed (pem) as 1L treatment in key subgroups with stage IV non-squamous non-small cell lung cancer (NSCLC).** *Proc ESMO* 2018;**Abstract LBA54**.

Boutros C et al. **Safety profiles of anti-CTLA-4 and anti-PD-1 antibodies alone and in combination.** *Nat Rev Clin Oncol* 2016;13(8):473-86.

Brahmer JR et al; National Comprehensive Cancer Network. **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.

Camidge R et al. **Brigatinib vs crizotinib in patients with ALK inhibitor-naive advanced ALK+ NSCLC: First report of a phase 3 trial (ALTA-1L).** *Proc WCLC* 2018;**Abstract PL02.03**.

Cappuzzo F et al. **IMpower130: Progression-free survival (PFS) and safety analysis from a randomised phase 3 study of carboplatin + *nab*-paclitaxel (CnP) with or without atezolizumab (atezo) as first-line (1L) therapy in advanced non-squamous NSCLC.** *Proc ESMO* 2018;**Abstract LBA53**.

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**.

Cascone T et al. **Neoadjuvant nivolumab (N) or nivolumab plus ipilimumab (NI) for resectable non-small cell lung cancer (NSCLC).** *Proc ESMO* 2018;**Abstract LBA49**.

Derosa L et al. **Negative association of antibiotics on clinical activity of immune checkpoint inhibitors in patients with advanced renal cell and non-small-cell lung cancer.** *Ann Oncol* 2018;29(6):1437-44.

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**.

Faivre-Finn C et al. **Efficacy and safety evaluation based on time from completion of radiotherapy to randomization with durvalumab or placebo in pts from PACIFIC.** *Proc ESMO* 2018;**Abstract 13630**.

Farago AF et al. **Rapid, robust and durable responses to larotrectinib in patients with TRK fusion non-small cell lung cancer.** *Proc WCLC* 2018;**Abstract P1.13.40**.

Forde PM et al. **Neoadjuvant PD-1 blockade in resectable lung cancer.** *N Engl J Med* 2018;378(21):1976-86.

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.

Hellmann MD et al. **Nivolumab (nivo) + ipilimumab (ipi) vs platinum-doublet chemotherapy (PT-DC) as first-line (1L) treatment (tx) for advanced non-small cell lung cancer (NSCLC): Initial results from CheckMate 227.** *Proc AACR* 2018;**Abstract CT077**.

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.

Hellmann MD et al. **Tumor mutational burden and efficacy of nivolumab monotherapy and in combination with ipilimumab in small-cell lung cancer.** *Cancer Cell* 2018;33(5):853-61.

Ho Cho J et al. **An open-label, multicenter, phase II single arm trial of osimertinib in NSCLC patients with uncommon EGFR mutation (KCSG-LU15-09).** *Proc WCLC* 2018;**Abstract OA10.05**.

Horn L et al; IMpower133 Study Group. **First-line atezolizumab plus chemotherapy in extensive-stage small-cell lung cancer.** *N Engl J Med* 2018;[Epub ahead of print].

Jotte RM et al. **IMpower131: Primary PFS and safety analysis of a randomized phase III study of atezolizumab + carboplatin + paclitaxel or *nab*-paclitaxel vs carboplatin + *nab*-paclitaxel as 1L therapy in advanced squamous NSCLC.** *Proc ASCO* 2018;**Abstract LBA9000**.

Kowanetz M et al. **IMpower150: Efficacy of atezolizumab (atezo) plus bevacizumab (bev) and chemotherapy (chemo) in 1L metastatic nonsquamous NSCLC (mNSCLC) across key subgroups.** *Proc AACR* 2018;**Abstract CT076**.

Select Publications

Lavolé A et al. **PD-1 blockade in HIV-infected patients with lung cancer: A new challenge or already a strategy?** *Ann Oncol* 2018;29(4):1065-6.

Leonardi GC et al. **Safety of programmed death-1 pathway inhibitors among patients with non-small-cell lung cancer and preexisting autoimmune disorders.** *J Clin Oncol* 2018;36(19):1905-12.

Liu S et al. **IMpower 133: Primary PFS, OS and safety in a PH1/3 study of 1L atezolizumab + carboplatin + etoposide in extensive-stage SCLC.** *Proc WCLC* 2018;**Abstract PL02.07**.

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**.

Oxnard GR et al. **Clinical activity of LOXO-292, a highly selective RET inhibitor, in patients with RET fusion+ non-small cell lung cancer.** *Proc WCLC* 2018;**Abstract OA12.07**.

Papadimitrakopoulou VA et al. **IMpower132: PFS and safety results with 1L atezolizumab + carboplatin/cisplatin + pemetrexed in stage IV non-squamous NSCLC.** *Proc WCLC* 2018;**Abstract OA05.07**.

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**.

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. **Mechanisms of acquired resistance to first-line osimertinib: Preliminary data from the phase III FLAURA study.** *Proc ESMO* 2018;**Abstract LBA50**.

Ramalingam SS 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.