Choices across treatment lines: Maximising patient outcomes in advanced or metastatic NSCLC

An independent satellite symposium held at the 7th European Lung Cancer Conference (ELCC 2017)

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Geneva, Switzerland

Chaired by Luis Paz-Ares

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Dear Colleagues

Thank you for attending the satellite symposium entitled ‘Choices across treatment lines: Maximising patient outcomes in advanced or metastatic NSCLC’ at the European Lung Cancer Conference, which we hope you found engaging and educational.

Geneva again provided an excellent host city for this conference, bringing together a unique community of medical professionals, all working towards a shared goal: to advance science, disseminate education and improve the practice of lung cancer specialists worldwide.

The symposium addressed the challenges of individualising treatment options to improve squamous NSCLC patient outcomes, along with patient pathways in rapid progression, through a series of case presentations. We hoped that by sharing the challenges facing clinicians in Europe, our expert Faculty could provide insights to aid the delegates in their clinical practice.

The therapy landscape and, accordingly, the patient pathway through it, continues to increase in complexity. During the session, the expert Faculty explored successive treatment line choice in patients with refractory/relapsed squamous NSCLC, along with treatment choices for advanced non-squamous NSCLC patients with rapid progression.

We hope that you found this symposium educational, and that it helped further your understanding of this evolving field by supporting the decision-making process in your clinical practice.

Yours faithfully,

Luis Paz-Ares

Luis Paz-Ares – Chair
Faculty biographies

**Professor Luiz Paz-Ares**  
(Symposium Chair)  
Madrid, Spain

Luis Paz-Ares graduated with a degree in Medicine from the Universidad Autonoma de Madrid in 1986, and completed a PhD in 1993 at the same University. He was a postdoctoral European Society for Medical Oncology (ESMO) Research Fellow in Medical Oncology at the Beatson Oncology Centre, University of Glasgow, Glasgow, Scotland (1993–1995), and completed a Master’s degree in Clinical Pharmacology at the University of Glasgow in 1995. Dr Paz-Ares also completed a Master’s degree in Clinical Unit Management at the UNED-Fundación Universidad Empresa, Madrid, Spain (2002–2003).

Between 2007-2014, he was Chair of the Medical Oncology Department at the Virgen del Rocio University Hospital in Seville, Spain. Dr Paz-Ares was then Head of the Pharmacology Unit and responsible for early clinical studies of thoracic and genitourinary tumours at the Hospital Universitario Doce de Octubre in Madrid, Spain (1995–1999; 2000–2007), and Visiting Research Fellow in the Prostate Cancer Programme at the Dana-Farber Cancer Institute in Boston, MA, USA (1999–2000).

Currently, Dr Paz-Ares is Chair of the Medical Oncology Department at the Hospital Universitario Doce de Octubre, Associate Professor at the Universidad Complutense, and Head of the Lung Cancer Unit at the CNIO (National Oncology Research Center), in Madrid, Spain.

Dr Paz-Ares’s research focuses on lung cancer and strategies for new therapy development, both in the lab and from a clinical point of view, and he has published more than 240 papers in peer-reviewed journals, including *New England Journal of Medicine, Lancet, Lancet Oncology, Journal of Clinical Oncology* and many book chapters.

He is an active member of various scientific societies including American Society of Clinical Oncology (ASCO), ESMO, the International Association for the Study of Lung Cancer (IASLC) and collaborative groups, the European Organisation for Research and Treatment of Cancer (EORTC), the Spanish Lung Cancer Group and the International Germ Cell Cancer Collaborative Group.
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European Lung Cancer Conference – Geneva, 2017

Professor Benjamin Besse
Villejuif, France

Benjamin Besse is Professor of Medical Oncology at Paris-Sud University, Orsay, France and a full-time Cancer Specialist at Gustave Roussy Cancer Campus, Villejuif, France. He gained his Medical Oncology degree in 2005 from Paris-Sud University and holds a PhD in Translational Research.

Currently, Dr Besse is Head of the Thoracic Oncology Unit at Gustave Roussy Cancer Campus. His main research interests are the application of molecular abnormalities to personalise treatment, circulating biomarkers, early drug development in thoracic tumours and thymic malignancies.

Dr Besse is involved in academic research through his position as member of the French Intergroupe Francophone de Cancérologie Thoracique (IFCT) Steering Committee and was elected Chair of the EORTC Lung Group in 2014. He coordinates the French network for thymic malignancies. He is Associate Editor of European Respiratory Journal. Dr Besse was Chair of the systemic treatment part of the European Society for Medical Oncology Consensus Conference on Lung Cancer published in Annals of Oncology in 2014. He has authored/co-authored more than 100 peer-reviewed papers.

Professor Egbert Smit
Amsterdam, The Netherlands

Egbert Smit is Professor of Pulmonary Medicine, with an emphasis on Pulmonary Oncology, at the Netherlands Cancer Institute, Department of Thoracic Oncology in Amsterdam, The Netherlands.

After completing his PhD thesis involving multidisciplinary studies in medical oncology, genetics and pulmonary medicine in 1990, Professor Smit became a Board-Certified pulmonologist in 1997. Since 1986, he has been involved in research and clinical trials ranging from chemoprevention of lung cancer to the treatment of advanced non-small-cell lung cancer. He has been the principal investigator of several national and international phase II and III trials.

In recent years, Professor Smit has focused his research on translational oncology and molecular imaging. This has resulted in over 300 contributions to peer-reviewed journals and book publications, as well as participation in multiple online educational NSCLC resources.

Professor Smit is also active in several national and international societies such as the IASLC, ASCO, the American Association of Cancer Research (AACR) and the EORTC. He served as Chair of a multidisciplinary task force for the development of clinical guidelines in small-cell lung cancer in The Netherlands and has been a member of the European Society of Medical Oncology Lung and other thoracic tumours Faculty Group since 2011.

He is also on the review board of several leading oncology journals and has co-organised a number of national meetings on thoracic oncology and postgraduate teaching courses. Professor Smit has been involved as a promoter and co-reader for over 20 PhD students.
The symposium Chair Professor Luis Paz-Ares, from Hospital Universitario Doce de Ocupre in Spain, opened the independent satellite symposium by noting the increasingly complex problem of the harder-to-treat squamous NSCLC patient and adenocarcinoma patients who rapidly progress.

Paz-Ares said that this symposium would provide practical advice for clinicians treating advanced or metastatic NSCLC in an increasingly intricate therapy landscape. Using case studies and interactive key pads, the delegates would be asked to vote on which treatment options they would use at defined points along the patients’ therapeutic journey. Paz-Ares highlighted that the delegates would be able to compare their treatment choices with that of their peers, and provide an opportunity for the Faculty to discuss the potential gaps between current common practice and that suggested by the latest data.

Keep an eye out for the Q&A between Paz-Ares and the experts, shown in blue boxes.
Individualising treatment options to improve squamous NSCLC patient outcomes

Professor Egbert Smit, from the Netherlands Cancer Institute, used case studies to guide the audience through two harder-to-treat squamous NSCLC patients. The case details, along with the audience votes on various treatment options and the evidence supporting these options, are described below.

**Case 1**

In a 62-year-old female with established COPD and rheumatoid arthritis, a computed tomography (CT) scan confirmed the presence of a large tumour in the right upper lobe, with a biopsy and subsequent histology confirming malignant cells (p63+, TTF-1 negative) leading to a diagnosis of cT2-3N2M0 squamous cell lung cancer in the right upper lobe.

Smit asked the audience which treatment option they would choose for this patient, and most opted for chemoradiation (39.3%) or induction followed by surgery (36.4%). Commenting on the audience response, Smit said that both these therapeutic options are supported by current guidelines and that they chose induction chemotherapy with cisplatin–gemcitabine followed by resection of the right upper lobe along with wedge resection of the right lower lobe. He added that some extension beyond the node was seen, resulting in the need for mediastinal radiotherapy.

Three years later, the patient presented with melanoma harbouring a BRAF-V600E mutation on the right foot and some evidence of inguinal lymph node metastases. Restaging, prior to the possibility of treating with a BRAF inhibitor, identified squamous cell lung cancer in the right upper lobe.

When asked which treatment option they would choose at this stage, the majority of attendees opted for immunotherapy with nivolumab (68.4%) or the use of the antiangiogenic agent ramucirumab in combination with docetaxel (19.3%). Smit confirmed that both these therapeutic options were supported by current guidelines and that their approach had been the use of immunotherapy with twice-weekly nivolumab.

However, after 3 cycles of treatment, more lesions were identified in the lung, subsequently confirmed as metastatic melanoma. The addition of ipilimumab to the therapeutic regimen led to a reduction in the mediastinal lymph nodes and all interpulmonary nodules disappeared. However, 3 months after the addition of ipilimumab, the patient presented with acute onset headache, diarrhoea, and fatigue (all grade 3 in severity). Magnetic resonance imaging (MRI) of the cerebrum identified hypophysitis which was successfully treated with prednisolone. As of May 2017, the patient remains in remission and has received no further treatment.

**Immune-related adverse events**

Smit highlighted that the toxicity dynamics of immunotherapy need to be more fully understood and that physicians need to be aware of immune-related adverse events (irAEs), such as severe dermatitis, colitis, hypophysitis, and liver necrosis (Figure 1)\(^1,2\). Hypophysitis, hepatitis, pancreatitis, iridocyclitis, lymphadenopathy, neuropathies, and nephritis have previously been reported with ipilimumab (Weber et al. 2012). Smit noted that early recognition of irAEs and initiation of treatment are critical to reduce the risk of sequelae. The presence of an underlying autoimmune disease, such as rheumatoid arthritis seen in this case, may also warrant the avoidance of immunotherapy given the limited safety data in these individuals and reports of high-grade irAEs requiring immunosuppression (Aya et al. 2016).
### Case 2

A routine chest CT scan revealed the presence of a nodule in the left lower lobe and also the right upper lobe in a 71-year-old male. Both lesions were positron emission tomography (PET) positive (standardised uptake value [SUV]_{max} 11) and transthoracic biopsy of the right lower lobe confirmed EGFR-negative squamous cell carcinoma (pT2a N0 M1 R0). A right inferior lobectomy was undertaken although the lesion in the left upper lobe was not resected due to compromised lung function tests, and no radiotherapy was administered. One month after the lobectomy, the lesion in the left upper lobe increased in size (SUV_{max} 16), but a transthoracic biopsy provided insufficient amount of tissue for final pathological diagnosis.

Smit asked the symposium attendees which treatment option they would now choose for this patient, considering the available CT and PET findings, along with the relative contraindication to locoregional treatments (including radiotherapy). Two-fifths (41.4%) of the audience opted for stereotactic radiotherapy, while others selected chemotherapy (21.6%), immunotherapy (19.1%), or wedge resection (17.9%). Smit noted that cisplatin and gemcitabine chemotherapy was selected as first-line treatment for this patient 3 years ago due to compromised lung function.

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**Figure 1: Immune-related adverse events with immunotherapy**

If not vigilant, may result in more serious immune-related adverse events.

<table>
<thead>
<tr>
<th>Skin</th>
<th>Hepatic</th>
<th>Gastrointestinal (GI)</th>
<th>Renal</th>
<th>Eye</th>
<th>Endocrine</th>
<th>Pulmonary</th>
<th>Neurologic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermatitis exfoliative</td>
<td>Hepatitis, autoimmune</td>
<td>Colitis</td>
<td>Nephritis, autoimmune</td>
<td>Uveitis</td>
<td>Hypothyroidism</td>
<td>Pneumonitis</td>
<td>Autimmune neuropathy</td>
</tr>
<tr>
<td>Erythema multiforme</td>
<td></td>
<td>Enterocolitis</td>
<td>Renal failure</td>
<td></td>
<td>Hyperthyroidism</td>
<td>Interstitial lung disease</td>
<td>Demyelinating Polyneuropathy</td>
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<tr>
<td>Stevens Johnson Syndrome</td>
<td></td>
<td>Necrotizing colitis</td>
<td></td>
<td></td>
<td>Adrenal insufficiency</td>
<td>Acute interstitial pneumonitis</td>
<td>Guillain-Barr</td>
</tr>
<tr>
<td>Toxic Epidermal Necrolysis</td>
<td></td>
<td>GI perforation</td>
<td></td>
<td></td>
<td>Hypophysitis</td>
<td></td>
<td>Myasthenia Gravis like syndrome</td>
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<tr>
<td>Vitiligo</td>
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<tr>
<td>Alopecia</td>
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</tr>
</tbody>
</table>

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If not vigilant, may result in more serious immune-related adverse events.
function. However, a subsequent biopsy confirmed squamous cell lung cancer.

The presenter wondered if the audience would treat this patient in the same way given the therapeutic advances over the last 3 years, and the majority (68.3%) confirmed that they would not. Smit agreed with this result commenting that “therapies such as antiangiogenic agents and immunotherapies have changed the treatment paradigm”.

He went on to explain that after a restaging CT scan had confirmed progressive disease in both the lung and right adrenal gland, and squamous cell carcinoma of the lung had been confirmed via transthoracic biopsy, the patient was given docetaxel monotherapy for 4 months as second-line treatment, but once again experienced progression at the lung and adrenal level. The patient received a second opinion, was deemed to be in fair general condition (performance status [PS] 1 and thoracic pain grade 1).

**Paz-Ares:**
Data suggest that the use of two immunotherapies is better when treating two diseases. Any thoughts?

**Smit:**
The main reason for adding ipilimumab to nivolumab was that the patient had melanoma in addition to squamous cell lung cancer, and this immunotherapy has previously demonstrated a survival benefit in melanoma.

**Besse:**
It is important to undertake a biopsy to confirm the presence of squamous cancer to ensure that the patient receives optimal treatment.

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**Figure 2: Overview of treatment options after progression on platinum**

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1. NCCN Clinical Practice Guidelines for Non-Small Cell Lung Cancer, V.3.2017
3. SANOFI. Taxotere® (docetaxel) prescribing information. Nov 2014
4. Eli Lilly and Company. Alimta® (pemetrexed) prescribing information. Sep 2013
11. EMA. Keytruda® (pembrolizumab) EPAR. September 2016
Smit then asked the audience which treatment they would select at this stage after further discussion with the multidisciplinary team. Most (88.5%) of the audience selected immunotherapy, which Smit agreed with, highlighting that recent second-line data from phase III studies such as CheckMate 017 and 057, KEYNOTE-010, and OAK have shown improved survival benefit with second-line nivolumab, pembrolizumab, and atezolizumab over docetaxel. He added that the patient received third-line treatment with an anti-PD-L1 agent and near complete resolution of the adrenal mass was achieved within 9 months. A solid lesion located in proximity of the bronchial stump of the right lower lobe increased in size but the patient refused further treatment and was lost to follow-up.

Smit concluded by highlighting the variety of second-line treatment options currently available following post-platinum progression (Figure 2). These options include chemotherapy (docetaxel, pemetrexed), EGFR tyrosine kinase inhibitors (TKIs; erlotinib, afatinib), antiangiogenics (ramucirumab, nintedanib – both in combination with docetaxel), and immunotherapies (nivolumab, pembrolizumab, atezolizumab). He added that the physician should be aware of multiple factors that require due consideration when selecting treatment, including patient characteristics (e.g. ECOG PS, smoking status), disease characteristics (e.g. mutational status, eligibility for antiangiogenic therapy), and prior treatment and response.

References

Patient pathways in rapid progression

Professor Benjamin Besse, from the Institut Gustave Roussy in Villejuif, France, focused on the increasingly complex problem of treating lung adenocarcinoma patients who rapidly progress, using two patient cases to highlight the key points. The case details, along with the audience votes on various treatment options and the evidence supporting these options, are described below.

Case 1

A 60-year-old female smoker presented with dyspnoea, with a subsequent chest x-ray identifying a right pulmonary mass. Lung cancer staging using a CT scan, PET scan, and brain MRI identified a large mediastinal lymph node with multiple brain metastases. Subsequent biopsy and molecular profiling confirmed cT2N2M1c, stage IVB KRAS-mutated adenocarcinoma.

Asked to vote on the first-line treatment option for this patient, more than half of the audience (62.3%) opted for cisplatin–pemetrexed plus whole brain radiotherapy (WBRT), which was indeed the approach used for the patient, Besse said. He added that although 14.5% of the audience selected carboplatin–gemcitabine plus WBRT, this approach could be potentially dangerous for the patient given that radiotherapy becomes more potent if used in combination with gemcitabine.

Besse said that the patient underwent 2 cycles of cisplatin–pemetrexed alongside WBRT, but a follow-up body CT scan identified bulky mediastinal progressive disease. Symptoms included increased dyspnoea and superior vein cava syndrome. He then asked the audience which second-line treatment they would now select for this patient. The majority (70%) selected thoracic radiotherapy followed by use of PD-1 inhibition or second-line chemotherapy, and Besse agreed with this selection, adding that this approach was used for the patient.

Noting that subsequent PD-L1 biomarker testing had proven negative (0% tumour cells), Besse asked the attendees to select a post-radiotherapy treatment option in light of this new information. Half (50.0%) of the audience selected second-line chemotherapy in combination with an antiangiogenic agent, that is, docetaxel plus ramucirumab, while 27.2% opted for a PD-1 inhibitor, regardless of PD-L1 expression. Besse confirmed that either option could be used, but that at the end of thoracic radiotherapy the patient received high-dose prednisolone. A body CT scan after 4 weeks confirmed a partial response. After a temporary ‘pause’ in treatment, nivolumab was administered for only 1 month by which time the patient was displaying paraparesis and a neuraxis MRI confirmed diffused meningeal carcinomatosis.

Which treatment would you use after radiotherapy in this clinical situation, Besse asked the audience. More than one-third of the attendees selected palliative care, although 26.5% said they would consider a PD-1 inhibitor regardless of PD-L1 expression. Only 5.2% of the audience would consider retreatment with platinum-based chemotherapy.

What are the options for second-line therapy in NSCLC?

Besse highlighted that antiangiogenic agents such as ramucirumab and nintedanib could be a suitable choice. Data from the phase III REVEL study demonstrated that ramucirumab, a human IgG1 monoclonal antibody that targets the extracellular domain of VEGFR-2, in combination with docetaxel improves survival as a second-line treatment for patients with stage
IV squamous and non-squamous NSCLC who had progressed during or after a first-line platinum-based chemotherapy regimen. The phase III LUME-Lung 1 study using the VEGF TKI nintedanib in combination with docetaxel also showed improved survival when used as a second-line option for patients with adenocarcinoma. Of note, most patients in both REVEL and LUME-Lung 1 studies were bevacizumab-naïve. The phase III IFCT-1503 ULTIMATE crossover study, comparing weekly paclitaxel and bevacizumab versus docetaxel as second- or third-line therapy in non-squamous NSCLC, demonstrated some improvement in progression-free survival (PFS) over docetaxel alone.

### Should we rechallenge with platinum?

Besse explained that a pooled analysis of data from advanced NSCLC patients treated with second-line pemetrexed plus carboplatin, following progression during or after first-line platinum-based chemotherapy, did not improve survival outcomes over pemetrexed alone.

However, some treatments appear useful in platinum-refractory patients. The TITAN study demonstrated survival benefits, albeit of less than 6 months, in platinum-refractory patients treated with erlotinib or chemotherapy (docetaxel or pemetrexed), although differences in toxicity risk between regimens allow patient choice (Figure 3). Results from LUME-LUNG 1 show an overall survival (OS) benefit of 3 months with the addition of nintedanib to docetaxel in platinum-refractory adenocarcinoma patients (Figure 4), while data from REVEL show an OS benefit of 2 months with ramucirumab plus docetaxel versus docetaxel alone in platinum-refractory advanced squamous and non-squamous NSCLC patients (Figure 5).

### Figure 3: Overall survival in platinum-refractory adenocarcinoma patients: erlotinib versus chemotherapy

<table>
<thead>
<tr>
<th></th>
<th>Erlotinib</th>
<th>CT</th>
<th>p-value</th>
</tr>
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<tbody>
<tr>
<td>Median, mo</td>
<td>5.3</td>
<td>5.5</td>
<td>0.73</td>
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<tr>
<td>HR (95% CI)</td>
<td>0.96 (0.78 to 1.19)</td>
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### Figure 4: Overall survival in platinum-refractory adenocarcinoma patients: nintedanib plus docetaxel versus docetaxel alone

PS 2 = 20%, CT = 52% docetaxel / 48% pemetrexed
Besse concluded this case study by explaining that the patient remained hospitalised, continuing to receive a high dose of steroids and palliative care alone.

### Case 2

A 59-year-old female with metastatic lung adenocarcinoma wild-type for known mutations (cT2 N3 M1b, PD-L1 1%) achieved stable disease after receiving 4 cycles of pemetrexed–cisplatin within a clinical study. However, the patient progressed with adrenal metastases after receiving maintenance treatment with the MEK1/2 inhibitor selumetinib for 6 weeks.

When asked to select a second-line treatment for this patient, the majority of the audience was split between a PD-1 inhibitor (37.8%), a PD-L1 inhibitor (26.1%), or a second-line antiogenic agent in combination with chemotherapy (28.9%), such as ramucirumab plus docetaxel. Besse commented that all three of these choices were suitable second-line treatment choices. However, the patient received the PD-1 inhibitor nivolumab given positive data supporting its use as a second-line agent in advanced non-squamous NSCLC following progression during or after platinum-based chemotherapy, with longer OS than with docetaxel alone.8 However, Besse explained that after an “earlier than normal” CT scan, the patient was found to have increased adrenal metastases after receiving 3 cycles of treatment and later died.

Why did the disease progress so rapidly after treatment with immunotherapy?

Besse explained that this phenomenon, referred to as pseudoprogression or hyperprogression, appears to occur in ~10% of patients treated with anti-PD-1/PD-L1 agents, and remains a concern given that the tumour growth rate can be twice that normally seen.8 Besse noted that unfortunately phenotypes particularly prone to hyperprogression remain unknown. As such, the European Medicines Agency has issued an ‘early risk warning’ that nivolumab-treated patients with poorer prognostic features and/or aggressive disease combined with <50% or no PD-L1 expression may be at higher risk of death within the first 3 months of treatment, based on a post-hoc exploratory multivariate analysis.8

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**Figure 5:** Overall survival in platinum-refractory advanced NSCLC patients: ramucirumab plus docetaxel versus docetaxel alone

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Paz-Ares: How certain are we that the incidence of hyperprogression in patients treated with PD-1/PD-L1 inhibitors is around 10%?

Besse: We ideally need to know the rate of progression prior to using immunotherapy, so we need to know the natural history of the disease beforehand via a CT scan. We are retrospectively collecting data from a large patient cohort to confirm the incidence of hyperprogression with PD-1/PD-L1 inhibitors.

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Paz-Ares: Have you seen hyperprogression in other cancer patients?

Smit: No.

Besse: A similar phenomenon has been reported in patients with head and neck cancer, and also in paediatric patients, suggesting these patients have a reduced benefit from immunotherapy.

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Paz-Ares: How can we identify patients at risk of hyperprogression?

Besse: No definitive phenotype has yet been identified.
Concluding, Besse examined ESMO guidelines on the second-line treatment of EGFR- and ALK-negative squamous and non-squamous disease (Figure 6). He noted that while nivolumab and docetaxel achieved results in PD-L1-negative tumours, nivolumab alone offers a more favourable toxicity profile. Antiangiogenic agents also clearly play a role in second-line therapy. Ramucirumab combined with docetaxel is recommended for use in NSCLC patients (PS 0–2) progressing after first-line chemotherapy, while nintedanib combined with docetaxel should be considered in adenocarcinoma patients, especially those progressing within 9 months of starting first-line chemotherapy.

References


Figure 6: ESMO guidelines: second-line treatment of EGFR- and ALK-negative squamous and non-squamous disease

Second-line treatment of EGFR- and ALK-negative disease (SCC and NSCC)

- Patients clinically or radiologically progressing after first-line chemotherapy with PS 0–2 should be offered second-line chemotherapy [I, A].
- Treatment may be prolonged if disease is controlled and toxicity acceptable [II, B].
- Comparable options as second-line treatment consist of pembrolizumab—for NSCC only—or docetaxel [I, B].
- Nivolumab at 3 mg/kg every 2 weeks is recommended in pretreated patients with advanced SCC [I, A; ESMO-MCBS v1.0 score: 5]. It represents a treatment option in pretreated patients with advanced NSCC [I, B; ESMO-MCBS v1.0 score: 5]. PD-L1-positive tumour patients benefitted from the use of nivolumab, compared with docetaxel [I, B]. In PD-L1-negative tumours, nivolumab and docetaxel showed similar results, with a more favourable toxicity profile for nivolumab [II, A].
- Nintedanib combined with docetaxel is a treatment option in patients with adenocarcinoma, especially those progressing within 9 months from the start of first-line chemotherapy [II, B].
- Ramucirumab combined with docetaxel is a treatment option in patients with NSCLC progressing after first-line chemotherapy with PS 0–2 [I, B; ESMO-MCBS v1.0 score: 1].
- Pembrolizumab at 2mg/kg every 3 weeks is recommended in pretreated patients with platinum-pretreated, advanced SCC or NSCC expressing PD-L1 [I, A; ESMO-MCBS v1.0 score: 3 if PD-L1 >1%; 5 if PD-L1 >50%].
- In patients unfit for chemotherapy, erlotinib is a potential option in patients with unknown EGFR status, WT EGFR and unfit for chemotherapy [II, C].
- In patients with SCC unfit for chemotherapy, afatinib is a potential option in patients with unknown EGFR status or EGFR WT patients with PS 0–2 [II, C; ESMO-MCBS v1.0 score: 1].
This independent programme is made possible thanks to educational sponsorship from Eli Lilly and Company